Wacker Silicones Corporation
3301 Sutton Road
Adrian, MI 49221-9397
(517) 264-8500
Fax (517) 264-8246

RECEIVED
WMD RECORD CENTER
JAN 09 1995

March 4, 1994

RECEIVED
MAR 9 1994
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA REGION V
US EPA RECORDS CENTER REGION 5
1005994

Ms. Cheryl Howe, Senior Environmental Engineer
Michigan Department of Natural Resources
Waste Management Division
Hazardous Waste Permits Section
Ottawa Building South
P. O. Box 30241
Lansing, Michigan 48909

Re: Wacker Silicones Corporation
(formerly SWS Silicones Corporation)
US EPA ID # MID 075400671

Dear Ms. Howe:

We currently have a Resource Conservation and Recovery Act (RCRA) Part B Hazardous Waste Storage Permit, which will expire on September 10, 1994.

We are requesting that the Michigan Department of Natural Resources (MDNR) Closure Out this permit and to change the status of our facility to that of Large Quantity Generator.

Enclosed are three copies of the Wacker Silicones Corporation RCRA Closure Plan. Please note that the cost has been updated recently to reflect the 1993 inflation factor. Also included are plot plans of our facility and storage areas.

If you have any questions, please call me at 517-264-8361.

Yours truly,

WACKER SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Administrator
Environmental Regulations

Certified

CC: Mr. Martin Jacobson
MDNR Jackson Office
Mr. Rich Traub
US EPA Region V

WACKER SILICONES CORPORATION

RCRA CLOSURE PLAN

DRUM STORAGE

It is estimated that the storage pad will require closure in about the year 2021. Generally, drum storage areas will be emptied by the removal of the drums to an approved disposer. Only Michigan, US EPA and Wacker-approved haulers will be used. Only US EPA, Wacker and possibly Michigan-approved disposers will be used.

The drum pad will be washed with water and industrial detergent. Washings will be put in drums for disposal by an approved hauler and disposer, if contaminated. Otherwise, the washings will go to the chemical sewer. The entire schedule of closure should take about three months.

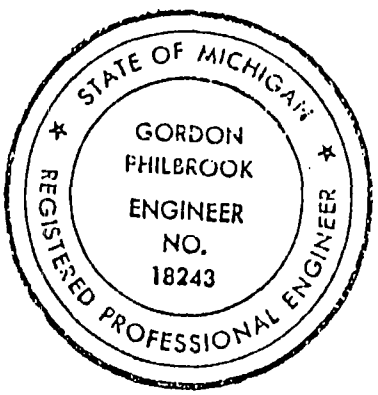
After thorough decontamination, the storage pad will be used for storage of hazardous wastes for periods less than 90 days, or other materials for any time.

An independent professional engineer will certify completion of the closure.

See attached forms for the closure plan drum storage area.

Certified, by,

Gordon C. Philbrook



Gordon C. Philbrook
WACKER SILICONES CORPORATION
Administrator,
Environmental Regulations, CHMM,
Professional Engineer,
State of Michigan
PE 18243
Revised: August 24, 1993

WACKER SILICONES CORPORATION

RCRA CLOSURE PLAN

DRUM STORAGE AREA

DATE: August 24, 1993 AREA: 2,500 FT^2

AREA DESCRIPTION: Hazardous waste pad; East of HiBay area

CAPACITY: 500 drums

MAXIMUM NUMBER OF DRUMS STORED: 400

WHEN CLOSED: Unknown; estimated in year 2021

CLOSURE COST: $53,000

8-24-93

WACKER SILICONES CORPORATION

RCRA CLOSURE PLAN

TOTAL CLOSURE COST

DRUM PAD

1.	Remove drums 400 X $120	$48,000
2.	Decontamination, sampling	5,000
	Net Cost	$53,000

8-24-93

WACKER SILICONES CORPORATION

RCRA CLOSURE PLAN

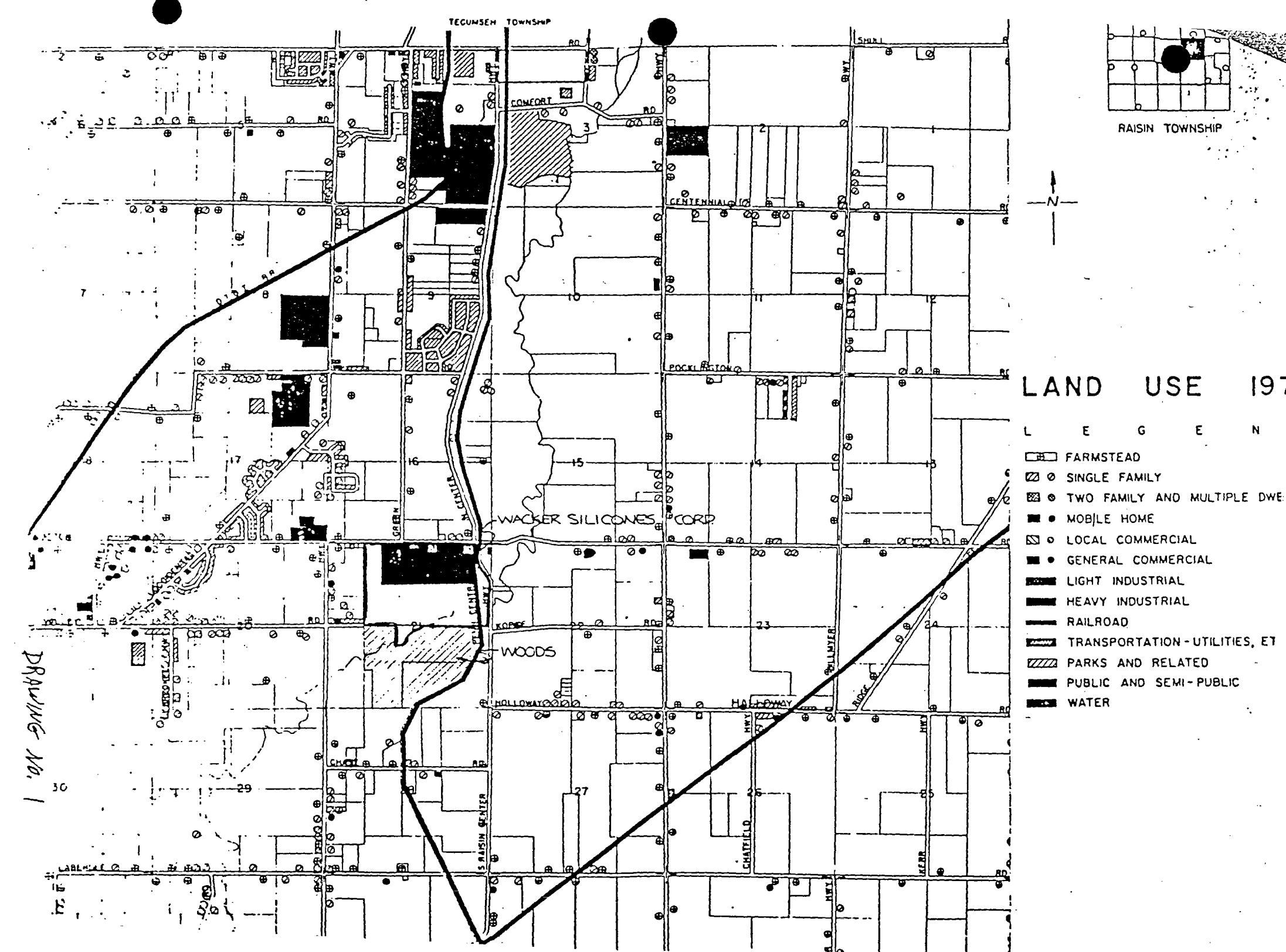
1994 ADDENDUM

1. Gross Domestic Product inflation for 1993 is 1.029.

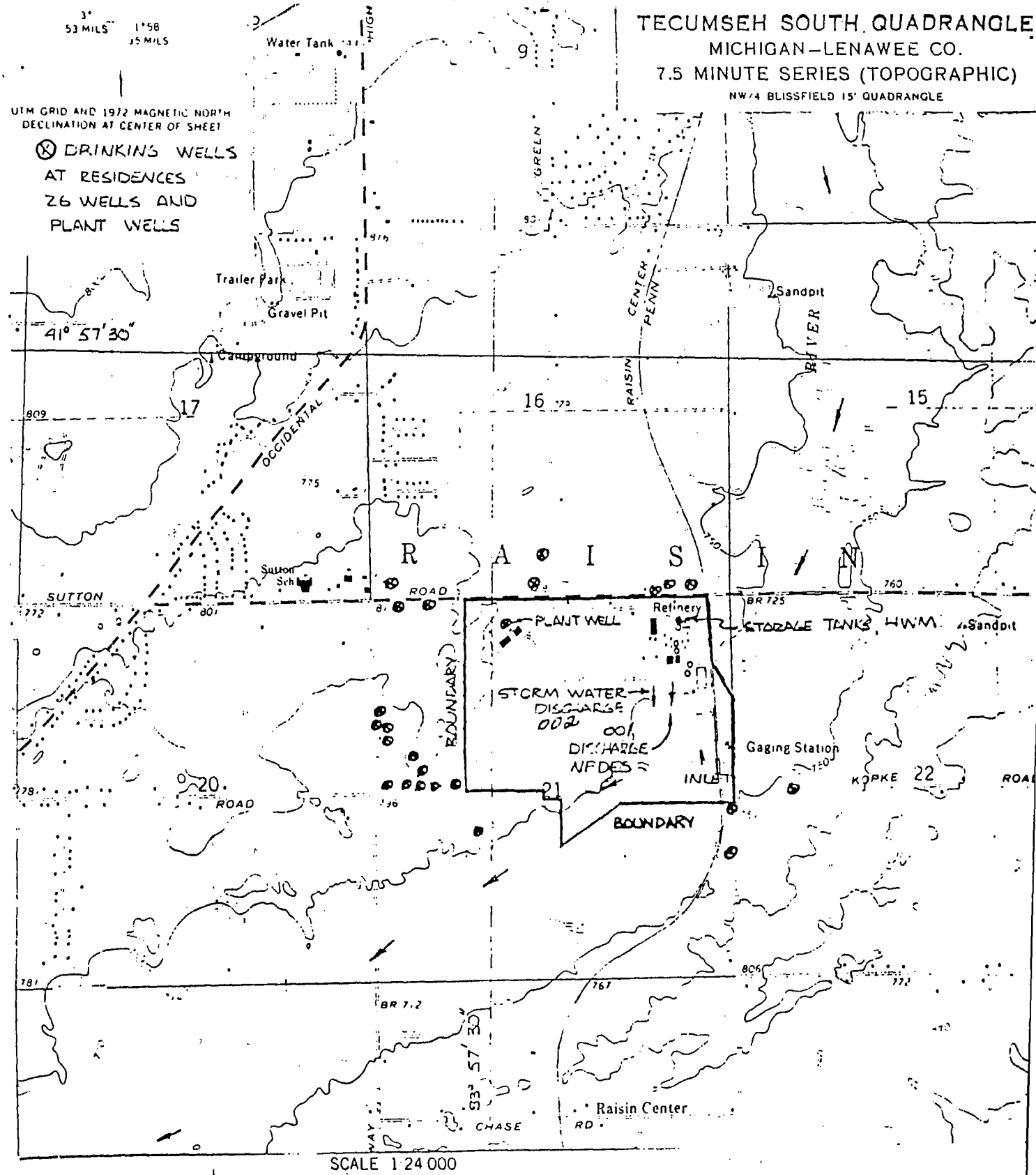
2. Closure Cost = $53,000 X 1.029 = $54,540.

GCP

2/17/94


TECUMSEH TOWNSHIP
RAISIN TOWNSHIP
COMFORT
CENTENNIAL
POCKLINGTON
WACKER SILICONES CORP
WOODS
HOLLOWAY
N. CENTER
S. RAISIN CENTER
CHATFIELD
N
LAND USE 197
L E G E N
FARMSTEAD
SINGLE FAMILY
TWO FAMILY AND MULTIPLE DWE
MOBILE HOME
LOCAL COMMERCIAL
GENERAL COMMERCIAL
LIGHT INDUSTRIAL
HEAVY INDUSTRIAL
RAILROAD
TRANSPORTATION - UTILITIES, ET
PARKS AND RELATED
PUBLIC AND SEMI - PUBLIC
WATER

DRAWING NO. 1

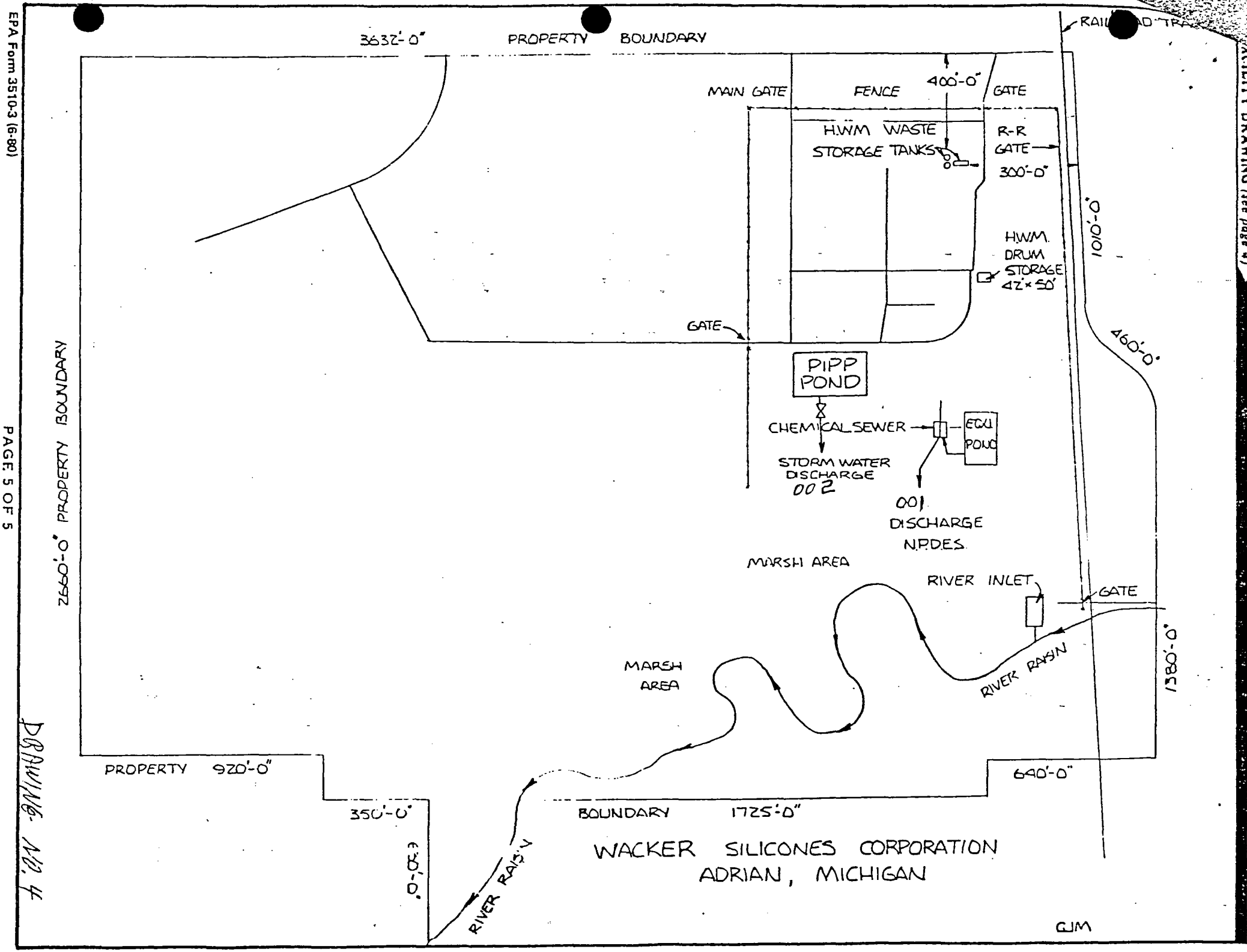


LOCATION MAP

WACKER SILICONES CORPORATION ADRIAN MICHIGAN

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

DRAWING NO. 2


3632'-0"
PROPERTY BOUNDARY
MAIN GATE
FENCE
400'-0"
GATE
H.W.M. WASTE STORAGE TANKS
R-R GATE
300'-0"
1010'-0"
H.W.M. DRUM STORAGE 42'×50'
460'-0"
GATE
PIPP POND
CHEMICAL SEWER
ETCU POND
STORM WATER DISCHARGE 002
001 DISCHARGE N.P.D.E.S.
MARSH AREA
RIVER INLET
GATE
2660'-0" PROPERTY BOUNDARY
MARSH AREA
RIVER RAISIN
1380'-0"
PROPERTY 920'-0"
350'-0"
640'-0"
BOUNDARY 1725'-0"
RIVER RAISIN
WACKER SILICONES CORPORATION
ADRIAN, MICHIGAN
GJM

DRAWING NO. 4

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WMD RECORD CENTER
JAN 09 1995

Wacker Silicones Corporation
3301 Sutton Road
Adrian, MI 49221-9397
(517) 264-8500
Fax (517) 264-8246

October 24, 1991

RECEIVED
OCT 29 1991
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Michigan Department of Natural Resources
Waste Management Division
1st Floor, South Ottawa Building
P. O. Box 30028
Lansing, Michigan 48909

Re: Wacker Silicones Corporation
(formerly SWS Silicones Corporation)
US EPA ID# MID 075400671

Gentlemen:

We have a final "Part B" Resource Conservation and Recovery Act (RCRA) Permit to store hazardous waste at our facility. The permit will expire on September 10, 1994.

The permit covers storage in containers on a storage pad, and storage in three tanks, T-101, T-105 and T-108.

In accordance with Act No. 64, R 299.9613 (Rule 613), Closure and Post-Closure, this letter is to notify you that we plan to do a partial-closure of this permit by closing-out the T-101 storage tank. This tank was used to store waste 1,1,1-trichloroethane. However, we no longer use this solvent as a cleaning agent.

The tank is now essentially empty. The waste 1,1,1-trichloroethane was sent to a solvent reclaimer, Petro Chem, Inc., in Detroit. Also a waste-water layer was sent to an approved waste treatment company, Environmental Waste Control, Inc. in Inkster. This included the first high-pressure lance washing. A small amount, (about 1,050 gallons) of rusty water remains in the tank.

Attached is a copy of the Wacker Silicones Corporation RCRA Closure Plan. We are proposing a slight deviation from the attached procedure. After the initial washing with a high pressure lauce (which did go to Environmental Waste Control), the subsequent washings, which will be only slightly contaminated, will be taken to our own on-site waste wash-water treating system, which is part of our

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OCT 29 1991
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

approved NPDES permit operation (Michigan Permit Number 0026034).

We expect to have the completed, certified closure of T-101 in about 90 days. We have arranged for the services of a professional engineer from SSOE, Inc. of Toledo, Ohio, to verify the closure procedure.

If you need any more information, please contact me at the above address, or call me at 517-264-8361.

Yours truly,

WACKER SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Administrator,
Environmental Regulations

Certified

CC: Mr. Martin Jacobson
(MDNR, Jackson MI)
US EPA, Region V

WACKER SILICONES CORPORATION

RCRA Closure Plan

I. Tanks

It is estimated that the tanks will require closure about the year 2001. Generally, tanks containing hazardous waste materials will be emptied to tank trucks for removal and disposal of contents. Only Michigan, US EPA, and Wacker-approved haulers will be used. Only US EPA and Wacker-approved disposers will be used.

Tanks and ancillary equipment will then be decontaminated by washing the tank, piping, pump, and associated equipment with three increments of water and industrial detergent. The washing agent will be recirculated and pumped by high pressure lance. Washings will be put in drums for disposal by an approved hauler and disposer.

The tanks, piping, and associated equipment will then be purged with air. The entire schedule of closure should take about 4 months.

The tanks can then be used to store hazardous wastes for periods less than 90 days.

An independent professional engineer will certify completion of the closure.

II. Drum Storage

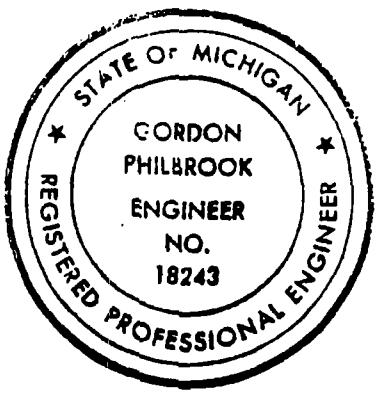
It is estimated that the storage pad will require closure in about the year 2021. Generally, drum storage areas will be emptied by the removal of the drums to an approved disposer. Only Michigan, US EPA and Wacker-approved haulers will be used. Only US EPA, Wacker and possibly Michigan-approved disposers will be used.

The drum pad will be washed with water and industrial detergent. Washings will be put in drums for disposal by an approved hauler and disposer, if contaminated. Otherwise, the washings will go to the chemical sewer. The entire schedule of closure should take about 3 months.

After thorough decontamination, the storage pad will be used for storage of hazardous wastes for periods less than 90 days.

An independent professional engineer will certify completion of the closure.

See attached forms for closure plan tanks and drum storage areas.



Certified by,

Gordon C. Philbrook

Gordon C. Philbrook
Wacker Silicones Corporation
Administrator, Environmental
Regulations
Professional Engineer
State of Michigan
PE 18243
Revised: February 29, 1988

Wacker Silicones
Corporation

3301 SUTTON ROAD
ADRIAN, MI 49221-9397
(517) 264-8500

June 16, 1989

Mr. David Petrovski
Geologist
US ENVIRONMENTAL PROTECTION AGENCY
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: 5HR-13
Permit Modification
MID 075 400 671
Adrian, Michigan 49221

Dear Mr. Petrovski:

This letter is in response to your visit to our facility on April 25, 1989 for a Visual Site Inspection (VSI) and your request for the following enclosed documents:

1. Twenty-three pictures, taken by Mr. Wayde Hartwick, US EPA, but developed by Wacker Silicones Corporation, showing the various Solid Waste Management Units (SWMU's) at our facility. We did not delete any of the pictures taken by Mr. Hartwick. The negatives are also included. We included information on the back of each picture indicating the equipment or view shown, the direction, the SWMU #, and the date.

2. Table I, which summarizes, in matrix form, the requested information on all 23 SWMU;s, including item description, location, date of starting and closing (if appropriate), size, capacity, material(s) of construction, lining, secondary contaminant, and various comments, including whether hazardous wastes or hazardous constituents were involved.

3. An overall facility drawing, taken from one of the hydrogeological studies, showing the perched aquifier contours, labeled "Water Table Contours, November 23, 1983. We marked up this drawing in red to show the location of all 23 SWMU's.

4. The completed form, which you gave to us, entitled "Certification Regarding Potential Releases from Solid Waste Management Units".

5. Copies of four questionnaires which were sent to the US EPA in 1988, "National Survey of Hazardous Waste Treatment, Storage Disposal, and Recycling Facilities for 1986", as follows:

   Questionnaire A, General Facility Information

   Questionnaire H, Wastewater Treatment

   Questionnaire O, Tank Systems

   Questionnaire GA, General Facility Information

   The covers of the four questionnaires have been marked up to show the relationship of various equipment to the 23 SWMU's as listed on Table I.

6. Information concerning the old evaporation pond and the old drum burial site, as requested, including various hydrogeological studies, monitoring well analyses, drum site soil study, contamination information during closing of both sites, and various plant drawings and sketches. Please refer to the attached "Summary index for two disposal sites", which contains 2 overall items, 22 items concerning the old pond, and 15 items concerning the old drum burial site.

After further considerations, we have decided not to pursue the closure of our RCRA Part B hazardous waste storage permit. Please refer to our letter to the US EPA on March 27, 1989, and your response to us dated April 14, 1989. We understand that there may be a permit modification, as outlined in your letters to us dated March 3, 1989 and April 21, 1989.

Please call us if you have any questions at the above telephone number, Extension 361, or direct dial me at 517-264-8361.

Yours truly,

WACKER SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Administrator,
Environmental Regulations

Certified

CC: No Attachments
D. Ullrich, EPA Certified
K. Burda, MDNR Certified
J. Calamungi
L. Lee, MDNR Certified
J. Patzke

SUMMARY INDEX FOR THE TWO DISPOSAL SITES

OVERALL (2 SITES)

OLD POND SITE

OLD DRUM BURIAL SITE

1.	Echardt Survey, portion of form concerning old drum burial site and old reactor bed dumpings site	1-79
2.	"Hydrogeologic Investigation of Disposal Area" Gilbert/Commonwealth	8-82
3.	GCP to MDNR, Well analyses metals, TOC, TOH	9-10-82
4.	GCP to MDNR, Well analyses, mass loading calculation	2-24-83
5.	Lab well analyses, metals	12-2-83
6.	"Additional Hydrogeologic Investigations of Disposal Area" Gilbert/Commonwealth	1-12-84
7.	Lab, Well analyses, Chlorides	8-15-84
8.	GCP to MDNR, drum removal, samples analyses	12-11-84
9.	MDNR interoffice, R. Babcock to V. Harris, drum removal summary, analyses of some drums and soil	12-12-84
10.	GCP memo, drum ditch soil analyses	12-14-84
11.	M-4S well average analyses and mass loading calculation	12-18-85
12.	Well analyses summary from 1-5-83 to 11-11-86	11-11-86
13.	Well analyses and chart, M4S	1-6-87
14.	"Soil Contamination Investigation", Soil and Materials Engineers (SME)	3-29-89
15.	Well analyses and M4S well graph	5-5-89

Wacker Silicones
Corporation

3301 SUTTON ROAD
ADRIAN, MI 49221-9397
(517) 263-5711

March 27, 1989

RECEIVED
MAR 30 1989
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Mr. David A. Ullrich
Associate Division Director
Waste Management Division
US Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: 5HR-13
Permit Modification
MID 075 400 671
Adrian, Michigan 49221

Dear Mr. Ullrich:

This letter is in reply to your letter dated March 3, 1989 concerning modification of our RCRA Part B permit.

This permit is for storage of hazardous wastes in containers and tanks. The reason that Wacker Silicones Corporation (formerly SWS Silicones Corporation) obtained the storage permit, at that time, was due to lack of adequate disposal contracts which undermined our confidence that we could stay in compliance with the generator "90 day rule", (40 CFR 262.34).

We have subsequently obtained disposal contracts with more companies so that we can comply with the storage time limit for generators.

Therefore, we are requesting that the US EPA allow the closure procedure as per 40 CFR 264.111, 264.113, 264.115, 264.178 and 264.197. A copy of the Wacker Silicones Corporation RCRA Closure Plan, revised 2-29-88, with a 1989 addendum, is attached.

We would start the procedure, as soon as the US EPA approves, and would be completed in about 3-4 months.

Therefore, as recently discussed with you on the telephone, a modification of the permit would not be necessary.

Please call me at the above telephone number, extension 361, for questions or further information.

Yours truly,

WACKER SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Administrator,
Environmental Regulations

Attachments

CC: Mr. Ken Burda, MDNR
Mr. Lee Carter, MDNR

GCP: Certified

MAR 0 3 1989

5HR-13

CERTIFIED MAIL P 611 589 643
RETURN RECEIPT REQUESTED

Mr. Gordon C. Philbrook
Environmental Control Coordinator
Wacker Silicones Corporation
3301 Sutton Road
Adrian, Michigan 49221-9397

RE: Permit Modification
MID 075 400 671
Adrian, Michigan

Dear Mr. Philbrook:

The facility referenced above currently has a Resource Conservation and Recovery Act (RCRA) permit, issued by the United States Environmental Protection Agency (U.S. EPA). This permit was issued in 1984, prior to the enactment of the Hazardous and Solid Waste Amendments (HSWA) of 1984, and thus did not contain conditions implementing regulations promulgated pursuant to the Amendments. These apply to all facilities, including those with permits issued before the Amendments. (See 53 FR/Wednesday, September 28, 1988, p37914 and 52 FR/Tuesday, December 1, 1987, p.45793, enclosed). Clarified in these rules is the Agency's authority to initiate permit modifications at facilities with existing permits, based on new regulations. The rules also explain that the permit is not a shield for provisions promulgated in accordance with the requirements of the HSWA.

We have determined that your facility is environmentally significant and therefore, corrective action for Solid Waste Management Units (SWMUs) as required by the 1984 HSWA may be necessary. A RCRA Facility Assessment (RFA) is currently being conducted for your facility by the U.S. EPA to further evaluate the need to address releases of hazardous wastes or hazardous constituents from SWMUs. Components of an RFA include a preliminary review, visual site inspection, and a sampling visit, if necessary. A member of my staff will be contacting you within the next month to arrange a site visit.

Should a permit modification be required, only the part of the permit being modified will be affected. Public participation including public notice and

request for hearing would be in accordance with 40 CFR Part 124. If you have any questions, or would like to discuss this further, please contact Mr. Richard Traub of my staff, at (312) 886-6136.

Sincerely,

ORIGINAL SIGNED BY
DAVID A. ULLRICH
David A. Ullrich
Associate Division Director
Waste Management Division

Enclosure

cc: Rett Nelson, ORC
Ken Burda, MDNR

SENDER: Complete items 1 and 2 when and 4.
Put your address in the "RETURN TO" Space card from being returned to you. The return delivered to and the date of delivery. For addi postmaster for fees and check box(es) for additi
1. ☐ Show to whom delivered, date, and addres
†(Extra charge)†

3. Article Addressed to:
Mr. Gordon C. Philbrook
Environmental Control Coordi
Wacker Silicones Corporation
3301 Sutton Road
Adrian, Michigan 49221-93

5. Signature – Addressee
X

6. Signature – Agent
X Janet Bosquez

7. Date of Delivery
MAR 6 1989

PS Form 3811, Mar. 1987 ★ U.S.G.P.O. 1987

P 611 589 643

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Gordon C. Philbrook	
Street and No. 3301 Sutton Road	
P.O. State and ZIP Code Adrian, Michigan 49221-9397	
Postage	$1.25
Certified Fee	85
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	90
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$2.00
Postmark or Date	

★ U.S.G.P.O. 1983-403-517
PS Form 3800, Feb. 1982

Richard Traub 5HRC-13
Michigan Section

RCRA PERMITS	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH CHIEF	CHIEF	A.D.D.	DIR
INIT.	JMD	RCT			RCT					
DATE	2/28/89	3/1/89			3/1/89			3/2/89	3/2/89	

FEB 1 0 1989

5HR-13

Mr. Kenneth Burda
Chief, Hazardous Waste Permits Section
Waste Management Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

RE: Permit Modifications
for Corrective Action

Dear Mr. Burda:

As you know, there are several facilities in Michigan that were issued Resource Conservation and Recovery Act permits by Region V prior to the enactment of the Hazardous and Solid Waste Amendments (HSWA) of 1984. These permits did not address corrective action for solid waste management units, which was subsequently required by the 1984 Amendments. Recent interpretations and changes to the regulations, make it clear, that, the United States Environmental Protection Agency may modify existing permits, if the requirements upon which the permit was issued have changed due to new regulations or judicial decisions. We are proposing to initiate permit modifications for corrective action, i.e., impose RCRA Facility Investigations if necessary at:

Facility	Location
Dearborn Refining	Dearborn
DuPont	Montague
SWS Silicones	Adrian
U.S. Chemical	Roseville
Van Waters and Rogers	Taylor

Although these are not all the facilities which have pre-HSWA permits, they have been targeted because of their significance under the Environmental Priorities Initiative and/or they are Superfund sites. Also the permits, which are effective for ten years, still have at least five years remaining on them. We believe that the permit process may be the most expedient manner in which to address the problems at these facilities.

We are currently coordinating our efforts with the Region V, Office of Superfund and need to include the state of Michigan also. Any comments, or concerns, you see that we need to address from the State perspective would be appreciated. It is anticipated that the permit modification process, which will include RCRA Facility Assessments, may take several months, however, we would like to reach a final decision on a permit action by

September of this year. If you have any questions or comments, please send them to me or call me, at 312/886-3136, as soon as possible. Thanks for your assistance.

Sincerely,

ORIGINAL SIGNED BY/
RICHARD TRAUB

Richard Traub, Chief
Michigan Section

cc: Karl E. Bremer
Marilyn Sabadaszba

bcc: Rich Traub
File

5HR:TRAUB:fmd:2-09-89

Computer Disc #1:b:permod.ca

RCRA PERMITS	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	RPB Chief	S.R. A.D.D.	WIL. DIR
INIT. DATE	FMD 2/10/89	CRT 2/10/89			CRT 2/10/89					

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: FEB 10 1989

SUBJECT: Permit Modifications for Corrective Action at Superfund Sites

FROM: Richard Traub, Chief
Michigan Section
RCRA Permitting Branch

ORIGINAL SIGNED BY/
RICHARD TRAUB

TO: Jonas Dikinis, Chief
Michigan/Wisconsin Section
Remedial & Enforcement Response Branch, OS

The RCRA Permitting Branch issued permits to facilities in Michigan in 1984, prior to the enactment of the Hazardous and Solid Waste Amendments (HSWA). These permits were issued for a duration of 10 years. Recent clarification of the regulations allow U.S. EPA to initiate permit modifications, if the requirements upon which the permit was based have changed, due to new regulations or judicial decisions. Prior to the HSWA, corrective action for solid waste management units was not required. We are proposing to initiate permit modifications to impose RCRA Facility Investigations if necessary, at some of these facilities. This is based on environmental significance and remaining permit life.

Four of these facilities: Dearborn Refining in Dearborn; DuPont E.I. De Nemours in Montague; SWS Silicones in Adrian; and U.S. Chemical in Roseville are listed in CERCLIS. We feel it is necessary to coordinate our efforts with your program to determine if the most effective manner of approaching these sites is through the permit modification process. Although the permit modification process may take several months, we would like to take action at these sites as quickly as possible. I request that you or a member of your staff contact me by February 22, 1989, to initiate coordination and discussion of these facilities. I can be reached at 6-6136, if you have any questions or would like to discuss this further, please call. Thank you for your assistance.

cc: Karl Bremer

5HR:TRAUB:fmd:2/9/89 Computer Disc #1:B:Permod.mem

4

N/A

SWS Silicones Corporation

3301 SUTTON ROAD • ADRIAN, MICHIGAN 49221-9397 • TELEPHONE (517) 263-5711

RECEIVED
JAN 24 1986
SWD - AIS
U.S. EPA, REGION V

January 17, 1986

RCRA Activities
United States Environmental Protection Agency
Region V
P. O. Box A3587
Attention: ATKJG
Chicago, Illinois 60690

Re: MID075400671
Hazardous Waste Permit Application
5HS-JCK-13

Gentlemen:

We received your letter, with its accompanying questionnaire relevant to RCRA facilities in interim status.

SWS Silicones Corporation is not in interim status. A final permit under the Resource Conservation and Recovery Act was issued for our storage facility on September 10, 1984.

The provisions of Subsection 3004(u) of the Solid Waste Disposal Act do not apply to facilities permitted prior to November 8, 1984.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 86-03, certified

cc: J. Calamungi
D. McGrade
T. J. Sayers

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

December 17, 1984

RECEIVED
DEC 20 1984
WASTE MANAGEMENT BRANCH

RCRA Activities
Regional Administrator
U. S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: SWS Silicones Corporation
MID 075400671
5HW-13

Gentlemen:

This letter is to confirm that high-level alarms have been installed in tanks T-101, T-105, and T-108 as required in the Compliance Schedule of our RCRA Permit, Section IV.F.

I am certifying as a registered professional engineer that the modification has been constructed in compliance with the permit, as outlined in Section I.D.11.

If you have any questions, please contact me at the above-mentioned phone number, extension 361.

Yours truly,

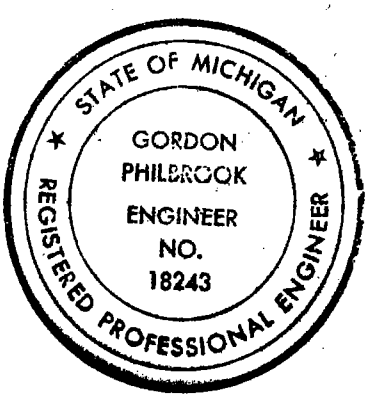
SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook, P. E.
Environmental Control Coordinator

GCP:pb 84-250, certified

cc: Mr. Alan Howard, MDNR; certified
J. Calamungi
M. J. Reale
T. J. Sayers



State of Michigan
PE #18243

COPY 1

BERMAN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: August 10, 1984

SUBJECT: Review of the Administrative Record
SWS Silicones Corporation

FROM: Chris Christenson, Chief
State Programs and Information Section

TO: Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Consistent with the agreement reached at the WMB/ORC meeting on April 25, 1984, I have reviewed the AR indicated above. I find the AR and the supporting documents in good order and consistent with the requirements of section 124.9 and section 124.18, and with established WMB procedures.

The materials should be submitted to the ORC.

cc: A. Debus

137 - 54

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
E. R. CAROLLO
MARLENE J. FLUHARTY
STEPHEN F. MONSMA
O. STEWART MYERS
RAYMOND POUPORE
HARRY H. WHITELEY

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

RONALD O. SKOOG, Director

June 6, 1984

U. S. Environmental Protection
Agency
Region 5
230 Dearborn Street
Chicago, Illinois 60604

ATTENTION: Mr. Mike Ohm

Dear Mr. Ohm:

The Wildlife Division of the Michigan Department of Natural Resources, has reviewed the notice of intent to issue a Resources Conservation and Recovery Act (RCRA) permit for SWS Silicones Corporation (SWS), Adrian, Michigan, to operate a hazardous waste storage facility on Sutton Road, Adrian, Michigan.

Since the container storage area was renovated in July, 1983, in order to fully comply with RCRA regulations, there appears to be no significant conflict with wildlife interests. Therefore, Wildlife Division defers to certain other divisions of the department with more expertise in this environmental area for a more critical appraisal of hazardous waste storage and disposal requirements.

Sincerely,

Charles Guenther, Chief
Wildlife Division
517-373-9310

CJG/MC/sam
cc: Tucker
Anderson
Elden
Mikula

BRANCH

137-50

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

RECEIVED
JUN 25 1984
WMD-RAIU
EPA, REGION V

June 18, 1984

RECEIVED
WASTE MANAGEMENT
BRANCH

Mr. Michael Ohm
U.S. EPA
Region V
Waste Management Branch
230 South Dearborn Street
Chicago, Illinois 60604

Re: SWS Silicones Corporation
MID 075400671

Dear Mr. Ohm:

This letter concerns some items in the preliminary draft for the RCRA-B permit for our facility. Most of the comments are of a minor nature (typographical errors, etc.) but two are of major concern to us. We discussed some of these with Mr. Allen Debus by telephone on May 23, 1984, and again on June 6, 1984.

One main item is the maximum quantity of 55-gallon drums to be held in the designated storage area. This is discussed in section III, (Storage in Containers), A. (Waste Identification), last sentence. Using the requirements of 40 CFR 264.175(b)(3), the maximum drum storage could be 800 drums. The 800 drum quantity is discussed in the RCRA-B application, Section D, D-1a, second sentence, and also fifth line from the bottom of the page. Please note that we also stated in the RCRA-A permit application, form 3, page 1, that the process design capacity for SOI storage was 44,000 gallons (800 drums). However, since the Closure Plan is based on 500 drums, we are formally requesting that the maximum quantity be listed as 500 drums. In the future, if we need to update the Closure Plan and/or the Financial letter of credit amount, we may ask for the maximum quantity to be 800 drums. Note that this is not a change in plant facilities, just a correction of a misunderstanding.

A second main item concerns section III, (Storage in Containers), C. (Compatibility of Waste with Containers). The permit indicates that wastes must be in D.O.T. 17E or 17H type steel drums. In the RCRA-B application, page D-3, we also stated that "some drums, used for in-plant storage and transfer operations, are steel drums in good condition". It is our understanding that all hazardous wastes do not have to be stored/shipped in D.O.T. specification drums. We are formally requesting that the permit refer to "steel containers in good condition". The special requirement for Cyclizer Waste and HCR Vent Waste is proper.

137.33a

Various minor items in the preliminary draft are as follows:

1. Statement of Basis, page 1, the term "alkaline fluid", which appears twice, should be "OH-endblocked silicone fluid".

2. Statement of Basis, page 1, the term "band ply tubes" should be "band ply lubes".

3. In Section III, (Storage in Containers), A.a. "Spend" should be "Spent".

4. Attachment Five - Closure Plan. The three pages, App. F-9, App. F-10, and App. F-11 are not required, as the updated Closure Plan costs shown on page App. F-8 reflect 1984 values.

If there are any questions, please call us. We trust that these changes will be made, before issuance of the permit.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 84-108, certified

cc: Mr. A. A. Debus, EPA, Region V; certified
Mr. W. C. McIntosh, MDNR; certified
J. Calamungi
G. F. Lengnick
M. J. Reale

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

MAY 15 1984

MEMORANDUM

SUBJECT: Review of Draft Permit SWS Silcones Corporation
Adrian, Michigan MID075400671

FROM: Michael Berman MB
Assistant Regional Counsel

TO: Alan Debus

1. Public Notice Memo - paragraph 1, line 4, a not an.

2. Statement of Basis - page 2, bottom. Is this appropriate place for Allen's name.

3. Statement of Basis - page 3. Section E is different than that used in other permits.(i.e. Dupont)

4. Statement of Basis -

   A. Page 4, I.D. #16 - Reference should be 270.30(1)(10) instead of (1)(7) and
   B. Page 4, I.D. #17 - Reference should be 270.30(1)(11) instead of (1)(8).
   C. Page 5, What about copies of Plan? (264.53)(i.e. Dupont)
   D. Page 5, What about required notice? (264.12)
   E. Page 5, What about preparedness and prevention?
   F. Page 5, What about the Manifest System?

5. Cover letter of permit is missing.

6. Signature page of permit is missing.

7. Paragraph on Documents to be Submitted Prior to Modification (IG) is missing.

8. Paragraph on Required Notice (See II B) is missing.

9. Paragraph on Location Standards (See II G) is missing.

10. Paragraph on Manifests is missing. (See II I)

137-32

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

April 17, 1984

RECEIVED
APR 19 1984
WASTE MANAGEMENT BRANCH

Mr. Allen Debus
RCRA Activities
Part-B Permit Application
Technical, Permits and Compliance Section
U.S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: SWS Silicones Corporation
MID 075400671
5HW-13
RCRA-B Application

Dear Mr. Debus:

This letter is a follow-up to your phone calls of April 11 and April 12, 1984 on the above subject.

1. A work order has been written to install "NO SMOKING" signs at the three storage tanks and the drum storage pad.

2. Attached are copies of the "Monthly Safety Equipment Checklists" for the plant operating areas. These are marked A to E.

3. Attached is a copy of the "Hazardous Work Permit". Note that the plant map, on the reverse side, does not even show the hazardous wastes storage areas. It would be very unlikely to expect any "hot work" to be required in those areas.

4. The Engineering department has been requested to design and install a high level alarm system for the three storage tanks. Table 7 (on page F-5) will be modified to include a daily check of the three level alarms.

5. In regards to pH (Table 3, page C-23), the only waste which we have which exceeds the pH limits (D002, corrosive) is the Cyclizer Waste, which is a non-aqueous, "goopy" (high viscosity) liquid. This material does not lend itself to a standard pH method. We know the pH is over 12.5 because of the nature of the ingredients; i.e., a lot of KOH is present.

6. Attached is a revised up-to-date Closure Cost. Please replace pages App. F-4 thru App. F-8. You can also delete pages App. F-9 thru App. F-11, since the new Closure Cost has the last three year's inflation rates included. Please note that the new Closure Cost is well below the Letter of Credit amount of $75,000.

0 137-27

RECEIVED
APR 19 1984
WMD-RAIU
EPA, REGION V

Sincerely,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 84-76, certified: attachs.
CC: W. C. McIntosh, MDNR-certified
J. Calamungi

COPY 2

DATE _____ (A)

CHECKER _____

TIME STARTED _____ TIME FINISHED _____

MONTHLY SAFETY EQUIPMENT CHECKLIST

High Bay Area

Ground Level	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher by R-902 (202)	1.	
2. Gas mask on west wall (condition & canister)	2.	
3. Gas mask by men's room (condition & canister)	3.	
4. Scott Air Pac by men's room	4.	
5. Stretcher in hallway by men's room	5.	
6. Safety shower by R-902	6.	
7. Eyewash by R-902	7.	
8. Fire extinguisher on east wall by ML pump room	8.	
9. Safety shower on east wall by ML pump room	9.	
10. Eyewash on east wall by ML pump room	10.	
11. Fire extinguisher on west wall below stairs (228)	11.	
12. Fire extinguisher on west wall by telephone (205)	12.	
13. Fire blanket on I-beam by T-928 scale	13.	
14. Fire extinguisher in ML pump room, north door (212)	14.	
15. Fire extinguisher in ML pump room, south door (211)	15.	
16. Safety shower on east wall by R-903	16.	
17. Eyewash on east wall by R-903	17.	
18. Gas mask on east wall by R-903 desk (condition & canister)	18.	
19. Safety shower on south wall by R-903	19.	
20. Eyewash on south wall by R-903	20.	
21. Fire extinguisher by M-916 (206)	21.	
22. Gas mask by M-916 (condition & canister)	22.	
23. 3-step portable ladder (L 4)	23.	
24. Fire extinguisher on north wall by T942 scale	24.	
25. Fire extinguisher by south door by M-922 (208)	25.	
26. Safety shower by post west of T-927	26.	
27. Eyewash by post, west of T-927	27.	
28. 3-step portable ladder (no wheels) (L2 & L1)	28.	

(A)2

High Bay Area

1st Level	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher by top of stairs by M-922 (210)	1.	
2. Fire extinguisher on handrail by T-942 (226)	2.	
3. Gas mask by fire extinguisher #226 (condition & canister)	3.	
4. Eyewash by T-942	4.	
5. Safety shower by T-942	5.	
6. Gas mask by top of T-927 (condition & canister)	6.	
7. Fire extinguisher by top of T-927 (209)	7.	
8. Fire extinguisher above R-903 (216)	8.	
9. Gas mask above R-903 (condition & canister)	9.	
10. Gas mask on handrail by R-905 (condition & canister)	10.	
11. Fire extinguisher on handrail by T-928 desk (215)	11.	
12. Safety shower by top of T-928	12.	
13. Eyewash by top of T-928	13.	
14. Fire extinguisher on handrail by R-902 (214)	14.	
15. Emergency light by office door	15.	
16. Emergency light above racks	16.	

2nd Level	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher by WFE (218)	1.	
2. Gas mask by WFE (condition & canister)	2.	
3. Fire extinguisher above R-903 (217)	3.	
4. Gas mask above R-903 (condition & canister)	4.	

3rd Level & Penthouse	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher by R-903 column (221)	1.	
2. Gas mask by R-903 column (condition & canister)	2.	
3. Fire extinguisher by top of R-910 column (220)	3.	
4. Gas mask by top of R-910 column (condition & canister)	4.	
5. Gas mask in penthouse (condition & canister)	5.	
6. Fire extinguisher top of R-901 column (219)	6.	
7. Gas mask top of R-901 column (condition & canister)	7.	

(A)3

Middle Area - High Bay

Ground Level	REMARKS (Needs repair or replacing)	O.K.
	.	
1. Fire extinguisher by north overhead door (190)	1.	
2. Emergency light by steps (north side)	2.	
3. Safety shower by south overhead door	3.	
4. Eyewash by south overhead door	4.	
5. Fire extinguisher by personnel door, south	5.	
6. Gas mask by bottom of T-962 stairs (condition & canister)	6.	
7. Emergency light by T-962 stairs	7.	
8. Fire extinguisher in motor control center (191)	8.	
9. 5-step movable ladder by F-791 totes (L3)	9.	
10. 3-step movable with handrail (L5)	10.	

1st Level	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher on south wall by Ribbon Blender (195)	1.	
2. Safety shower by top of M-919	2.	
3. Eyewash by top of M-919	3.	
4. Fire extinguisher by top of T-962 stairs (196)	4.	
5. Gas mask by top of T-962 stairs (condition & canister)	5.	
6. Emergency light by top of T-962 stairs	6.	
7. Fire extinguisher by north door	7.	\

Office Area	REMARKS (Needs repair or replacing	O.K.
1. Two fire extinguishers outside conference room (200 & 201)	1.	
2. Fire extinguisher inside conference room door (198)	2.	
3. Emergency light, stairway	3.	
4. Fire extinguisher in hallway by drinking fountain	4.	
5. Scott Air-Pack in hallway	5.	
6. Emergency light by General Foreman's office	6.	

A4

Middle Area - Hi Bay

Bottling Room	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher by south door on east wall (194)	1.	
2. Safety shower by south door on east wall	2.	
3. Eyewash by south door on east wall	3.	
4. Emergency light by south door on east wall	4.	
5. Fire extinguisher by north door on north wall	5.	
6. Safety shower by north door on east wall	6.	
7. Eyewash by north door on east wall	7.	

Outside Area	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher outside east door of cold warehouse (148)	1.	
2. Fire extinguisher outside west door of cold warehouse	2.	
3. Fire extinguisher outside fire water room of cold warehouse (227)	3.	
4. Fire extinguisher, north side of new hot room	4.	
5. Fire extinguisher by underground tanks	5.	
6. Fire extinguisher, new motor control center (225)	6.	
7. Emergency lights, south & north sides of cold warehouse	7.	
8. Large portable ladder, cold whse. (L6)	8.	

Middle Warehouse	REMARKS (Needs repair or replacing)	O.K.
1. Fire extinguisher, west wall (next to racks) (18)	1.	
2. Fire extinguisher, aisle between rows b & c (12 & 13)	2.	
3. Fire extinguisher (fence by transformer) (14)	3.	
4. Fire extinguisher, aisle between rows d & e (15 & 16)	4.	

A 5

Middle Area - Hi Bay - Continued

Black House	REMARKS (Needs repair or replacing)	O.K.
1. Fire Extinguisher, north wall	1.	
2. Fire extinguisher, south wall	2.	
3. Safety eyewash, east wall	3.	
4. Safety shower, east wall	4.	

SRD:jjf
01/26/84

B1

POLYMERS SAFETY EQUIPMENT INSPECTION

OPERATOR_____ DATE_____

FREQUENCY: WEEKLY

WHEN: MONDAY EACH WEEK

WHO: OPERATOR AS ASSIGNED BY SHIFT FOREMAN.

HOW: TOUR THE DEPARTMENT CHECKING EACH UNIT LISTED FOR CLEANLINESS, ACCESSIBILITY.

TESTING: EACH SHOWER AND EYEWASH SHOULD BE ACTIVATED FOR 5-10 SECONDS. WATER ON FLOOR AFTER TESTING IS TO BE CLEANED UP IMMEDIATELY.

ACTION:

SAFETY SHOWERS & EYEWASH	CLEAN		ACCESSIBLE		WATER FLOW		REMARKS
	YES	NO	YES	NO	ADEQUATE	INADEQUATE	
1. Cyclics Ground Floor							
2. Cyclics 2nd Floor							
3. P.C. Lab East							
4. P.C. Lab West							
5. Fluids Ground Flr. R802							
6. Fluids Ground Flr. R804							
7. Fluids 2nd Floor R802							
8. Fluids 2nd Floor R805							
9. P.C. Lab West Sink							
10.							
11.							

(B)2

POLYMERS SAFETY EQUIPMENT INSPECTION

FOREMAN_____ DATE_____

OPERATOR_____

FREQUENCY: MONTHLY

WHEN: TO BE CONDUCTED DURING THE FIRST FULL CALENDAR WEEK EACH MONTH.

WHO: THE SHIFT FOREMAN ON THE 8 X 4 SHIFT ACCOMPANIED BY ONE OPERATOR. (IT IS SUGGESTED THAT THE OPERATORS BE ROTATED).

HOW: TOUR THE DEPARTMENT CHECKING EACH UNIT LISTED, PAYING CLOSE ATTENTION TO CLEANLINESS, ACCESSIBILITY, PHYSICAL CONDITION OF THE UNIT AND ITS CONTAINER.

ACTION: NOTE IN WRITING ANY ACTION REQUIRED AND/OR TAKEN TO CORRECT SUBSTANDARD CONDITIONS. USE BACK OF FORM IF NECESSARY.

SCOTT AIR PAKS	CLEAN		ACCESSIBLE		PRESSURE		REMARKS
	YES	NO	YES	NO	FULL	NOT FULL	
1. Office Hallway South							
2. Control Room							

GAS MASKS	CANISTER		CANISTER DATES		CLEAN		BAG COND.		BOX
	SEALED	UNSEALED	STORAGE	SEAL BREAK	YES	NO	OK	REPLACED	
1. Ground Level T-406									
2. Ground Level Cyc. Bldg.									
3. 2nd Floor Cyc. Bldg.									
4. P.C. Lab North Bench									
5. Fluids 2nd Flr. R-802									
6. Fluids 2nd Flr. T-806									
7. Fluids 1st Flr. R-801									
8. C-503 3rd Deck									
9. C-505 4th Deck									
10. C-505 5th Deck									
11. C-505 6th Deck									
12. 2nd Flr. Cyc. Outside									
13. Drum Building									
14. Mixer Area by Control Panel									
15. Solvent Shed									
16. Fluid 1st Flr. R-806									
17. C500 1st Level									
18. C505 2nd Level									

RTV

AREA _____ SUPERVISOR _____ DATE _____ TIME INSPECTED _____ A.M. P.M. SHIFT

HOUSEKEEPING

Floors _____

Aisles _____

Hold Area _____

Returned Goods Area _____

Benches _____

Tool Box _____

Lockers _____

Toilets _____

Eyewash Fountain _____

Overhead Doors _____

Personnel Doors _____

TOOLS

Broken _____

Worn Out _____

New Ones Needed _____

SAFETY EQUIPMENT

Safety Shower _____

Fire Extinguisher _____

WAREHOUSE

Drums Stacked Neat _____

Fillers Stacked _____

Fillers - Part Bags Put Away _____

Drums in Correct Rows _____

Drum Tags Facing Out _____

MAINTENANCE & WORK ORDER NUMBER

Lights _____

Fans _____

Equipment _____

_____

_____

Lift Truck _____

Hoist Chains _____

Ladders _____

_____

Foreman _____

General Foreman _____

MONTH

HCR Monthly Fire Extinguisher Checklist

(D)

	Locations	Date Checked	Checked By	Action Taken
1.	Outside HCR Offices			
2.	South Side Small Package Room			
3.	West Wall outside Label Room			
4.	By Extruder 704			
5.	Between Mixer 701 & 702 Mill			
6.	Between Mill 704 & 708			
7.	South Wall M-603 Area			
8.	Opposite M-603 Mixer			
9.	Wall North of Mixer 602			
10.	Wall South of Mixer 601			
11.	Wall West of Mill 703			
12.	South Wall of Chiller Room			
13.	South Wall of Y-400 Room			
14.	South Wall of Y-400 Room - by D_3 Tote			
15.	First Level Y-400 Deck - by Stairs			
16.	First Level Y-400 Deck - on Railing			
17.	Roof Level Y-400 Room - on Railing			
18.	South of Whse 702 - Outside			
19.	South of Whse 701 - Outside			
20.	North of Whse 701 - Outside			
21.	Wall West of M-704			
22.	North Wall of Whse 702			
23.	North Wall of Whse 701			
24.	Inside Small Package Room			

MONTH _____

#CR

(D)2

Monthly Safety Equipment Checklist

1. Scott Airpak - Location: North Door Y-400 Area (Outside)
   Date Checked _____ Checked By _____
   Action Taken:

---

2. Scott Airpak - Location: South Door Y-400 Area (Inside)
   Date Checked _____ Checked By _____
   Action Taken:

---

3. Scott Airpak - Location: Y-400 room (First Level)
   Date Checked _____ Checked By _____
   Action Taken:

---

4. Scott Airpak - Location: Y-400 room (Roof Level)
   Date Checked _____ Checked By _____
   Action Taken:

---

5. Full Face Respirator - Location: Solvent Shed
   Date Checked _____ Checked By _____
   Action Taken:

---

6. Ladders - Location: Misc. -- Be Sure to check all ladders

1. Date Checked _____ Checked By _____
2. Date Checked _____ Checked By _____
3. Date Checked _____ Checked By _____
4. Date Checked _____ Checked By _____
5. Date Checked _____ Checked By _____
6. Date Checked _____ Checked By _____
7. Date Checked _____ Checked By _____
8. Date Checked _____ Checked By _____
9. Date Checked _____ Checked By _____
10. Date Checked _____ Checked By _____
11. Date Checked _____ Checked By _____
12. Date Checked _____ Checked By _____

Actions Taken -- 1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

MAINTENANCE SAFETY INSPECTION

(E)

	GOOD	NEEDS IMPROVEMENT
HOUSEKEEPING		
DIRTY RAGS IN METAL CONTAINER		
DOORWAYS		
FLOOR CONDITION		
TRASH RECEPTICLE		
PIPE RACK		
HOSES ORDERLY		
CYLINDERS CHAINED & CAPPED		
EQUIPMENT		
EQUIPMENT LOCKED OUT		
FACE SHIELD NEAR GRINDER		
TOOL REST 1/8"		
FACE SHIELD NEAR CUT OFF		
TORCH GAS CYLINDERS OFF		
GUARDS IN PLACE		
NORTH CRANE		
SOUTH CRANE OH		
SOUTH CRANE BENCH		
DIE LIFTER		
MANLIFT		
BENJU BOOM		
SCISSOR LIFT		
FORK TRUCK (SEE BACK)		
SAFETY		
SPRINKLER SUPPLY VALVE		
EXTINGUISHER 237		
EXTINGUISHER 238		
EXTINGUISHER 236		
EXTINGUISHER 234		
EXTINGUISHER 235		
EXTINGUISHER 245		
EXTINGUISHER 244		
EXTINGUISHER ON WELDER		
FIRE BLANKET		
FIRE TRUCK (SEE BACK)		

WEEKLY FIRE TRUCK INSPECTION SHEET

BATTERY_____ LIGHTS_____

OIL_____ TIRES_____

GAS_____

EQUIPMENT:

TOOLS_____ FIRE HOSE_____

OZ. BOTTLES_____ MONITOR_____

SCOTT AIR PACS_____ #300 EXTINGUISHER_____

GLOVES & GAS MASK_____ SMALL EXTINGUISHER_____

SHOP SAFETY INSPECTION_____

FIRE BLANKET_____

STRETCHER_____

FIRE EXIT_____

SCOTT AIR PAC BOTTLES_____

FORK TRUCK CHECK LIST AREA_____ HOURS_____ TRUCK NO._____

INSPECTION ITEMS	OK	NEEDS REPAIR OR OIL		OTHER REMARKS
			Qts	
OIL				
HORN				
BRAKES				
HYDRO HOSES & BELTS				
BATTERY WATER				
TIRES				
LIGHTS				
SAFETY NEUTRAL SWITCH				
CHAINS AND LIFT CYLINDER				

Date: 04/13/84
Revision No.: 2

SWS SILICONES CORPORATION

CLOSURE PLAN

Tanks
****

DATE 5/3/81 TAG NO. T-101

CAPACITY 25,000 gallon MATERIAL OF CONSTRUCTION steel

MAXIMUM USUALLY STORED 10,000 gallon

MISCELLANEOUS horizontal; 200 PSIG pressure rating, 4" breathing vent with nitrogen pad

NATURE OF CONTENTS 1,1,1 trichloroethane waste solvent

UNLOADING METHOD Wilden pump thru a GAF-type filter to a bulk truck

WHEN CLOSED unknown, estimated 20 years (2001)

CLOSURE COST $5,290

SWS SILICONES CORPORATION

CLOSURE PLAN

Tanks

****

DATE 5/3/81 TAG NO. T-105

CAPACITY 14,900 gallon MATERIAL OF CONSTRUCTION steel

MAXIMUM USUALLY STORED 9,000 gallon

MISCELLANEOUS vertical, 3" vac/0.5 PSIG pressure rating, 4" breathing vent w/nitrogen pad; 8" relief valve

NATURE OF CONTENTS various Hi Bay ignitable waste solvents

UNLOADING METHOD Wilden pump thru a GAF-type filter to a bulk truck

WHEN CLOSED unknown, estimated 20 years (2001)

CLOSURE COST $5,810

Date: 04/13/84
Revision No.: 2

SWS SILICONES CORPORATION

CLOSURE PLAN

Tanks

****

DATE 5/3/81 TAG NO. T-108

CAPACITY 14,900 gallon MATERIAL OF CONSTRUCTION steel

MAXIMUM USUALLY STORED 9,000 gallon

MISCELLANEOUS vertical, 3" vac/0.5 PSIG pressure rating, 4" breathing vent w/nitrogen pad; 8" relief valve

NATURE OF CONTENTS RTV mineral spirits waste solvent

UNLOADING METHOD Wilden pump thru a GAF-type filter to a bulk truck

WHEN CLOSED unknown, estimated 20 years (2001)

CLOSURE COST $5,810

Date: 04/13/84
Revision No.: 2

SWS SILICONES CORPORATION

CLOSURE PLAN

Drum Storage Area
****

DATE 5/3/81 AREA 2,500 Ft^2

AREA DESCRIPTION Hazardous Waste pad; E of Hi Bay area

MAXIMUM NUMBER OF DRUMS USUALLY STORED 500

WHEN CLOSED unknown, estimated 40 years (2021)

CLOSURE COST $44,500

TOTAL CLOSURE COST

T-101		$ 5,290
T-105		5,810
T-108		5,810
East pad		44,500
	TOTAL	$61,410

COST ESTIMATE, TANKS:

T-101

1. Sell 10,000 gallon (but, no credit)		$ 0
2. Freight, 3 x $900		2,700
3. Cleaning solvent		1,210
4. Solvent disposal		360
5. Two (2) operators		780
6. Cleaning pump		240
	NET COST	$5,290

T-105 (& T-108)

1. Haul by Systech 9,000 gal x $.423/gallon		$3,810 each
2. Cleaning solvent		730
3. Two (2) operators		730
4. Solvent disposal		300
5. Cleaning pump		240
	NET COST	$5,810 each

Drum Pad

1. Remove drums 500 x $85	$42,500
2. Decontamination	2,000
	$44,500

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
E. R. CAROLLO
MARLENE J. FLUHARTY
STEPHEN F. MONSMA
O. STEWART MYERS
RAYMOND POUPORE
HARRY H. WHITELEY

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

RONALD O. SKOOG, Director

April 3, 1984

Mr. William H. Miner, Chief
Technical, Permits and Compliance Section, 5HW-TUB
U.S. EPA - Region V
230 S. Dearborn
Chicago, Illinois 60604

Re: MID075400671 SWS Silicones Part B
Technical Deficiencies

Dear Mr. Miner:

As requested by your office, I have reviewed the above referenced facility's Part B application for technical deficiencies. A list of technical deficiencies in a draft letter of response is enclosed.

The due date for this review was March 13, 1984. SWS Silicones March 5, 1984 submittal was received by the EPA March 12, 1984 and by the DNR March 15, 1984. Upon review, the submittal was determined to be a minor modification. As per our Cooperative Arrangement, 21 days should be added to our review time, making the new deadline April 3, 1984.

Please do not hesitate to contact me at 517-373-2730 if you have any questions.

Sincerely,

W. C. McIntosh

W. C. McIntosh, Engineer
Facilities Permit Unit
Hazardous Waste Division

cc: Jodi Traub
Bob Basch (w/attachments)

Received
4-6-84
RAIU

COPY 2

Mr. Joseph Calamungi
Director of Manufacturing
SWS Silicones Corporation
Adrian, Michigan 49221

Re: Notice of Technical Deficiency
MID075400671 Part B Application

Dear Mr. Calamungi:

The United States Environmental Protection Agency (U.S. EPA) has completed a technical review of your Part B application for a permit to be issued under the authority of Section 3005 of the Resource Conservation and Recovery Act (RCRA), as amended. Pursuant to 40 CFR Parts 122.4 and 124.3, this review was conducted to check for technical adequacy of your application against a list of required information found in 40 CFR Parts 270 and 264.

The U.S. EPA has found your application to be deficient and further clarification and/or supplemental information is needed before a technical review can be completed. You are to provide all requested information in quadruplicate. The due date for the submittal of this information is _____; however, you are encouraged to submit this information at your earliest convenience.

The U.S. EPA intends to work cooperatively with the Michigan Department of Natural Resources (MDNR) in processing your permit application. Should the MDNR become authorized to permit storage facilities during the processing period, the MDNR will make the final determination on your application. A copy of the Part B application has been sent to the MDNR and a copy of your response will also be sent to them.

The U.S. EPA is committed to conducting the RCRA permitting process as promptly and efficiently as possible. Please feel free to contact Mr. Allen A. Debus of my staff at 312-886-6151 if you have any questions regarding our review.

Sincerely,

William H. Miner, Chief
Technical Permits and Compliance
Section

Attachment
cc: A. Howard, Hazardous Waste Division, MDNR
B. Basch, Lansing District Supervisor

Technical Deficiencies

1. The topographic map is deficient. The map must include;

   a. An area of at least 1,000 feet around the facility,

   b. A scale not to exceed 200 feet per inch,

   c. Elevation contours.

   (40 CFR 270.14(b)(19))

2. The chemical and physical analyses of waste stored are incomplete. Silicones, fillers and siloxanes are listed in the analyses. These are general classes of materials and need further identification. (40 CFR 270.14(b)(2) and 264.13(a))

3. The information regarding tank storage areas is deficient. The following is required:

   a. Portions of pages D8, D9, and D10 detailing tank design specification diagrams are illegible. Legible diagrams must be submitted.

   b. A description of feed systems for all tanks,

   c. A description of the overflow system for tank T-101,

   d. A description of the pressure relief valves for tanks T-105 and T-108.

   (40 CFR 270.16, 264.191 and 264.192)

4. The security procedures require further description. Describe the frequency the hazardous waste storage areas are checked during non work hours. (40 CFR 270.14(b)(4) and 264.14(b)(1))

5. The inspection schedule and log are deficient. The written schedule must include inspections of safety equipment, emergency equipment and security devices. (40 CFR 270.14(b)(5) and 264.15(b))

6. The demonstration of the precautions used to prevent ignition of wastes is inadequate. It must be demonstrated that ignitable wastes are protected from sources of ignition including but not limited to flames, smoking, cutting, welding and sparks. No smoking signs must be placed conspicuously in the ignitable waste storage areas. (40 CFR 270.14(b)(9), 264.17(a), (c) and 264.198(a)(2))

7. The closure plan is deficient. The following is required;

   a. A schedule of closure activity that is detailed enough to allow tracking of the progress of closure.

   b. The application stated that the waste stored in tank T-101 will be sold. There is no guarantee that the waste will retain its value at the time of closure. Disposal costs must be estimated for this waste and incorporated into the closure plan.

   (40 CFR 270.14(b)(13), (14), 264.111, 112 and 142)

1.a – 1.c - Topo map was provided w/ Part A.

2. I feel the waste analyses provided are sufficient such that they contain all the info. which must be known to treat, store, or dispose of hazardous waste --

3. We have sufficient info on tanks also. I had enough material to determine tank shell thickness by ASME & API computations — overflow systems has been addressed — by high level alarms. pressure relief valves are described in Attachment 8.

4. I feel this is adequately covered in Part B

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

Received WMB 3/23/84

March 19, 1984

Mr. Allen A. Debus
United States Environmental Protection Agency
Region V
RCRA Activities, Part B Permit Application
Technical, Permits and Compliance Section
230 South Dearborn Street
Chicago, Illinois 60604

Re: RCRA Part B Application
SWS Silicones Corporation
EPA ID# MID075400671
5HW-13

Dear Mr. Debus:

In the RCRA Part B application update package recently sent to you (March 5, 1984), we inadvertently issued a new page as G-7a when it should have been Appendix G-7a.

Please insert the enclosed page App. G-7a in your binder and remove the page G-7a.

Sincerely yours,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 84-56, certified (4 sets)
Enclosure (1)

cc: J. Calamungi
M. J. Reale, Westport

RECEIVED
MAR 22 1984
WASTE MANAGEMENT BRANCH

137-24

Date: 2/2/84
Revision No.: 0

AMENDMENT

This Amendment, dated this 1st day of July 1983, amends the Trust Agreement entered into by SWS Silicones Corporation and Continental Illinois National Bank & Trust Co. dated October 4, 1982 as follows:

1. Schedule A is amended by deleting the amount "$62,200" therein and substituting the amount "$75,000" in its place and by deleting the date "February 18, 1982" therein and substituting the date "March 31, 1983" in its place.

2. Schedule B is amended by deleting the amount "$62,200" therein and substituting the amount "$75,000" in its place.

Except for the foregoing amendments, the Trust Agreement shall remain in full force and effect.

In witness whereof, the parties hereto have executed this Amendment as of the day and year above written.

CONTINENTAL ILLINOIS NATIONAL BANK & TRUST COMPANY OF CHICAGO

By: _____

Title: SECOND VICE PRESIDENT

SWS SILICONES CORPORATION

By: _____

Title: Vice President & General Manager

READ AND APPROVED:

ENVIRONMENTAL PROTECTION AGENCY

By: _____

Title: Environmental Scientist

Date: 2/2/84
Revision No.: 0

AMENDMENT

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By: _____

Title: SECOND VICE PRESIDENT

SWS SILICONES CORPORATION

By: _____

Title: Vice President & General Manager

READ AND APPROVED:

ENVIRONMENTAL PROTECTION AGENCY

By: _____

Title: Environmental Scientist

Date: 2/2/84
Revision No.: 0

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By: _____

Title: SECOND VICE PRESIDENT

SWS SILICONES CORPORATION

By: _____

Title: Vice President & General Manager

READ AND APPROVED:

ENVIRONMENTAL PROTECTION AGENCY

By: _____

Title: Environmental Scientist

Date: 2/2/84
Revision No.: 0

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By: _____

Title: SECOND VICE PRESIDENT

SWS SILICONES CORPORATION

By: _____

Title: Vice President & General Manager

READ AND APPROVED:

ENVIRONMENTAL PROTECTION AGENCY

By: _____

Title: Environmental Scientist

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

March 5, 1984

Mr. Allen A. Debus
United States Environmental Protection Agency
Region V
RCRA Activities, Part B Permit Application
Technical, Permits and Compliance Section
230 South Dearborn Street
Chicago, Illinois 60604

Re: RCRA Part B Application
SWS Silicones Corporation
EPA ID# MID075400671
5HW-13

Dear Mr. Debus:

As discussed on the telephone with Gordon Philbrook, enclosed is the revised Closure Plan (RCRA Part B - Appendix F, Item 7 below).

Also enclosed are the latest updates to the RCRA Part B Application submittal:

1) Section C Tables:
Please replace Table 1 (page C-2), Table 2 (page C-22), and Table 5 (page C-25) with the revised ones attached.

2) Section F:
Please replace page F-20 with the revised one attached.

3) Section G:
Please ADD the attached page G-7A immediately after page G-7.

4) Section I:
Please replace pages I-2, I-3 and I-4 with the revised ones attached.

137-22

5) Appendix B:
Please replace pages App. B-31 to App. B-39 with the revised pages App. B-31 to App. B-37.

6) Appendix D:
Please replace the whole Appendix D section with the revised Appendix D (Oil and Hazardous Substances - Spill Prevention Control and Countermeasure Plan) attached.

7) Appendix F:
Please replace the whole Appendix F with the revised Appendix F (Closure Plan) attached.

Received WMB 3/9/84

Please contact us if you have any questions.

Yours truly,

SWS SILICONES CORPORATION

Haikyong Kim

Haikyong Kim
Project Engineer

HK:pb 84-22, certified (4 sets)

cc: J. Calamungi
G. C. Philbrook
M. J. Reale, Westport

received 3-12-84

COPY 2

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

February 3, 1984

Mr. Allen A. Debus
United States Environmental Protection Agency
Region V
RCRA Activities, Part B Permit Application
Technical, Permits and Compliance Section
230 South Dearborn Street
Chicago, Illinois 60604

Re: RCRA Part B Application
SWS Silicones Corporation
EPA ID# MID075400671
5HW-13

Dear Mr. Debus:

This letter is in reference to your telephone call of February 1, 1984.

A. CFR 40, 264.192 (b)(1) (Tank Over-filling Prevention)

We can demonstrate that we meet this requirement as follows:

1. The tanks are not used continuously; only batch filling is done from drums or tote tanks (350 to 450 gallons), and then only every few days or even less frequently.

2. The tanks are not piped up to the plant or any other source. The drums and/or tote tanks are taken to the tank area by fork lift trucks. There, the containers are connected to the permanent suction piping-pump system and pumped into the tank one drum (or tote tank) at a time.

3. The operator is physically present in the tank area during this procedure. He can readily see the tank level gage and can easily judge that one more drum (or tote tank) will not over-fill the tank. He can also readily see the overflow pipe, and could shut off the pump immediately.

4. A "running" inventory of the tank is kept in a plant log book and the department supervisor can tell when the tank is even coming close to being full. In fact, we will probably not ever have more than 9,000 gallons in these 15,000 gallon storage tanks (T-105 and T-108). Also, T-101 would probably not ever have more than 15,000 gallons in this 25,000 gallon tank.

5. Please refer to pages D-11 to D-15 for more information.

137-21a

RECEIVED
WASTE MANAGEMENT BRANCH

B. Drawings of T-105 and T-108 (pages D-8 to 10)

The attached copy of part of the "original" blueprint on these tanks shows that the welds were "spot" x-rayed.

C. CFR 40, 264.198 (a)(2) (Tank Protection from Ignition)

Refer to pages D-12 to D-15, and the attached revised page F-20.

D. Financial Information

Attached is a new page for Appendix G, App. G-7a, which is an amendment from Continental Illinois National Bank & Trust Company to raise the coverage of the Letter of Credit and Trust Agreement to $75,000.

E. Revised Closure Plan

As discussed on the phone, we will soon be sending you a revised Closure Plan procedure. This will affect pages I-2 to I-4 and Appendix F.

If there are any other questions or concerns, please let us know.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 84-35, certified
(3 sets)

cc: J. Calamungi
T. J. Sayers

F-5h Management of Incompatible Wastes in Waste Piles

SWS Silicones Corporation does not have any waste piles. Therefore, this Section F-5h is not applicable.

F-5i Management of Ignitable Wastes in Tanks

The T-105 and T-108 tanks have a controlled nitrogen pad of about 0.5 PSIG. If the gaseous volume is increased by liquid removal or by temperature drop, nitrogen will automatically bleed into the tank to maintain the pad pressure. Alternately, when the gaseous volume is reduced, some nitrogen (and vapors) are automatically released from the tank, so as not to exceed the 0.5 PSIG. We have a Michigan Department of Natural Resources air permit for the vent releases.

The tanks are well grounded. The fill piping is a dip tube which discharges to the bottom of the tank, thus avoiding static electricity problems. The tanks are located in a remote area from the plant production processes.

AMENDMENT

This Amendment, dated this 1st day of July 1983, amends the Trust Agreement entered into by SWS Silicones Corporation and Continental Illinois National Bank & Trust Co. dated October 4, 1982 as follows:

1. Schedule A is amended by deleting the amount "$62,200" therein and substituting the amount "$75,000" in its place and by deleting the date "February 18, 1982" therein and substituting the date "March 31, 1983" in its place.

2. Schedule B is amended by deleting the amount "$62,200" therein and substituting the amount "$75,000" in its place.

Except for the foregoing amendments, the Trust Agreement shall remain in full force and effect.

In witness whereof, the parties hereto have executed this Amendment as of the day and year above written.

CONTINENTAL ILLINOIS NATIONAL BANK & TRUST COMPANY OF CHICAGO

By: _____

Title: SECOND VICE PRESIDENT

SWS SILICONES CORPORATION

By: _____

Title: Vice President & General Manager

READ AND APPROVED:

ENVIRONMENTAL PROTECTION AGENCY

By: _____

Title: _____

5HW-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Joseph Calamungi
Director of Manufacturing
SWS Silicones Corporation
Sutton Road
Adrian, Michigan 49221

Re: MID075400671

Dear Mr. Calamungi:

Enclosed is a copy of the final Resource Conservation and Recovery Act (RCRA) Permit for your proposed facility at the above referenced location. The effective date of the permit, as issued, is the date indicated on the cover page of the permit.

The duration of the permit is ten (10) years. However, the United States Environmental Protection Agency may modify, revoke, reissue or terminate this permit based on causes specified in 40 Code of Federal Regulations (CFR) Section 270.40 and 270.41.

You have the right to appeal any condition of the permit pursuant to 40 Code of Federal Regulations (CFR) Section 124.19. The failure of your company to meet any portion of the permit could result in civil and/or criminal penalties.

Sincerely yours,

137-55

Basil G. Constantelos, Director
Waste Management Division

Enclosures

cc: Alan Howard, MDNR

DEC 13 1983

Mr. Joseph Calcaterra
Director of Manufacturing
S/S Silkcones Corporation
Adrian, Michigan 49221

Dear Mr. Calcaterra:

Thank you for submitting the information called for in my letter of October 25, 1983, regarding your inactive surface impoundment. The information has been reviewed by the United States Environmental Protection Agency (U.S. EPA). The U.S. EPA would like to advise you of its determination that this surface impoundment is non-regulated under the Resource Conservation and Recovery Act (RCRA) because it was rendered inactive prior to November 19, 1980, and was subsequently closed with the intentions of constituting final disposal.

The enclosed memorandum from John Skinner (U.S. EPA-HQ), dated August 17, 1983, clarifies the issue of whether hazardous waste remaining in the closed site would possibly be considered "in storage" under 40 CFR Part 265.228(c). Storage occurs when hazardous waste is held for a temporary period. Since placement of hazardous waste in the surface impoundment constitutes final disposal, your surface impoundment is not regulated under Subtitle C of RCRA.

Since this issue has been resolved, the U.S. EPA has requested the Michigan Department of Natural Resources (MDNR) under its FY '84 Cooperative Agreement to complete its technical review, and to make a final determination as to whether a RCRA permit should be issued to S/S.

If you have further questions or comments on these matters, or would like to keep updated on the status of your hazardous waste permit application, please contact Mr. Allen A. Dennis of my staff at (312) 886-6181.

Sincerely yours,

ORIGINAL SIGNED BY
WILLIAM H. MINER

William H. Miner, Chief
Technical, Permits and Compliance Section

137-19

Enclosure

bcc: Glen McIntosh, (MDNR)
Jodi Traub, (SS)

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIR.
SIGNATURE					WEM			
DATE	12/09/83	12/12/83			12/12/83	12/13/83		

DEC 13 1983

Mr. Alan J. Howard
Chief, Technical Services Section
Hazardous Waste Division
Michigan Department of Natural Resources
Post Office Box [illegible]
Lansing, Michigan [illegible]

ATTENTION: Chan McIntosh

RE: SWS Silicones Corporation
MID[illegible]

Dear Mr. Howard:

Enclosed is a copy of the additional information submitted by the applicant in response to our letter of October 28, 198[illegible]. Please complete the technical review, and submit the State's recommendation that the permit be either issued or denied, in accordance with the anticipated [illegible] Cooperative Arrangement. If the State recommends issuance of the permit, please submit a draft permit and Statement of Basis by February [illegible], 1984.

If you have any questions regarding this application, please contact Mr. Allan G. Debus of my staff at (312) [illegible].

Sincerely yours,

ORIGINAL SIGNED BY
WILLIAM H. MINER

William H. Miner, Chief
Technical, Permits and Compliance Section

137-18

Enclosure

bcc: Jodi Traub (SS)
Joseph Boyle (SIC)

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD D...
INITIALS	JH	AD			WEM	DHW		
5HW-13:ADebus:THagwood:12/09/83								
DATE	12/09/83	12/12/83			12/12/83	12/13/83		

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

November 22, 1983

RECEIVED
NOV 25 1983
WASTE MANAGEMENT BRANCH

Mr. William H. Miner
Chief, Technical, Permits
and Compliance Section
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: RCRA-B Application
5HW-13

Dear Mr. Miner:

This letter is a response to your letter of October 25, 1983, concerning the inactive surface impoundment located on our facility.

As you note in your letter of October 25, 1983, SWS has properly filed a notice under CERCLA, Sec. 103(c), covering the inactive surface impoundment. A follow-up CERCLA inspection was conducted by Ecology and Environment Inc. under contract to EPA. An inspection report is being prepared by EPA Region V. We would suggest that any further inquiry be channeled through the Region V Superfund Office in order to avoid duplicative and time-consuming information requests.

It is our position that the impoundment is in no way related to our RCRA Part B application which, as you know, does not include a land disposal facility. The pond, now closed and capped, cannot be considered a TSD facility under RCRA. Nevertheless, we are submitting the requested information for your review.

The following items correspond to the questions posed in your letter:

1. The attached Table I outlines the use and closure of the evaporation pond.

2. The pond was used in two distinctly different ways over time.

   A. During 1971-1974, the lime-slurry-silane mixture sent to the pond (see Table I, Item 2) would not have been classified as a hazardous waste under 40 C.F.R., Sec. 261.

137-16

RECEIVED
12-1-83

COPY 2

B. From 1975-1980, the pond received equipment wash waters which did contain traces of various solvents. Under present regulations such waste streams may have been tested for ignitability. However, the low concentrations would have made a positive result extremely unlikely.

Some of the wash waters may also have been independently classifiable as corrosive; however, counter-balancing acid and caustic washes would have achieved instantaneous neutralization. This, coupled with pH adjustment and treatment in the pond, would have resulted in a non-hazardous classification under RCRA (see Table I, Item 3).

3. The closure plan, developed with the Michigan Department of Natural Resources input and approval, was meant to constitute final disposal.

4. The approved closure plan and certificate of closure is attached; the attachments are numbered 1, 5, and 6.

Yours truly,

SWS SILICONES CORPORATION

Joseph Calamungi
Director of Manufacturing

JC:pb 83-229, certified mail
enclosures

cc: C. McIntosh, MDNR, certified mail
G. C. Philbrook
G. L. Ford
T. J. Sayers

TABLE I

Historical Outline of Evaporation Pond

1. Pond was built in 1970-1971.

2. From 1971 to 1974, the pond was used as a lime-slurry system to neutralize silanes from the Monomers production area. The pond water was recycled back to the Monomers area for lime-slurry make-up. There was no discharge from the pond. The Monomers production area was shut down at the end of 1974.

3. From 1975 to 1980, the pond was used to treat various plant washwaters by equalization, aeration, neutralization, evaporation, biological activity and settling. Here again, there was no discharge from the pond.

4. We had determined to close the pond in 1979. Flow curtailment was started. By May, 1980, all flows to the pond were stopped and all pipes were cemented closed.

5. On September 26, 1980, a proposed corrective program for the removal and proper disposal of the evaporation-settling pond contents, and closure plan for the pond site, was submitted to the Michigan Department of Natural Resources. Refer to attachment 1.

6. On January 11, 1982, SWS sent a letter to the Michigan Department of Natural Resources requesting expedition of the closure plan, since there was a Compliance Schedule in the new NPDES permit to have the pond closure completed by October 31, 1982. See attachment 2.

7. On April 14, 1982, more data was submitted to the Michigan Department of Natural Resources concerning sludge analysis. See attachment 3.

8. On May 27, 1982, more data was submitted to the Michigan Department of Natural Resources concerning pond water analysis. See attachment 4.

9. On July 15, 1982, Michigan Department of Natural Resources approved the removal of water from the pond to the chemical sewer treating system. See attachment 5.

10. On July 26, 1982, Michigan Department of Natural Resources approved the September 26, 1980 Closure Plan, with minor modifications. See attachment 5.

11. Water was removed from the pond to the chemical sewer treating system during last two weeks of July, 1982.

12. Pond sludge was fixed with limestone berm mix during August, 1982.

13. Clay cap and soil cap was installed during September, 1982.

14. Top soil and seeding was done during October, 1982.

15. On October 21, 1982, a formal, written "notice of pond closure" was submitted to the Michigan Department of Natural Resources. See attachment 6. The approximate cost of closure was $150,000.

16. Ms. Catherine Morse of the Michigan Department of Natural Resources visited our plant on November 9, 1982. The pond area was inspected by her and verified as closed.

SWS SILICONES CORPORATION

CLOSURE OF EVAPORATION-SETTLING POND
Refer to Drawing 0-181

I. Diking

Install dike across the pond, East to West, using Limestone Berm Mix. Top level will be 42" below final cap grade. Pump water from North portion of pond to South portion. This will allow drying and fixation of North portion. This will also facilitate settling and ultimate removal of the water from the South portion.

Berm mix, amount 600 cu yds.

If necessary to further facilitate water removal, it may be necessary to install another dike across the South portion of the pond, North to South. Pump water to Southwest section. This could allow more control and efficiency of removing all the water from the pond.

Berm mix, amount, 600 cu yds.

II. Water Removal

The South portion can be slowly pumped to the chemical sewer treating system at the rate of 10,000 gallons per day for an estimated 24 days. A study of the pond BOD and chloride levels, and the current stream 001 discharge BOD and chloride levels, indicates that we could handle 10,000 gallons per day of pond water. We may reach the maximum allowed BOD and chloride limits of the NPDES permit. The pond water would be controlled so as to not exceed (on purpose) these limits. As the weather gets colder, the BOD limit will be more difficult to control.

III. Fixation of Sludge

Add Limestone Berm Mix to fill in pond to a level within 42 inches of final grade; level of berm mix will vary from 3 to 4 feet deep. The berm mix will be compacted by 3 passes of a dozer.

Material, 4,000 to 4,600 cu yds.

IV. Fill

Cover pond with 12 inches of fill. This will be compacted in lifts of 6 inches each, with 3 passes of a dozer. The finished surface should be reasonably smooth and free of sharp objects.

Material, 1,300 cu yds.

V. Clay Capping

Cover pond with 12 inches of clay. This material must have a permeability less or equal to 1×10^{-7} cm/sec. This will be compacted in two 6 inch lifts, with 3 passes of the dozer. Contour as shown on Drawing 0-181, to over-lap whole area and slope Eastwards.

Material, 2,000 cu yds.

VI. Soil Layer

Cover clay layer with 12 inches of select soil. This will be compacted in lifts of 6 inches each, with 3 passes of a dozer. This should be natural or imported soil capable of sustaining shallow-rooted and/or deep rooted vegetation.

Material, 2,000 cu yds.

VII. Top Soil Layer

Apply 6 inches of top soil to bring the site to final grade. This should be natural or imported top soil capable of supporting indigenous vegetation.

Material, 1,000 cu yds.

VIII. Final Grading

The final grade shall be as shown on Drawing 0-181. This will be a 2% slope to the East. The East edge will have a 10:1 maximum slope.

IX. Seeding

Seed the entire area with a local blend of grass seed, or suitable ground cover vegetation, probably in the Spring.

X. Monitoring

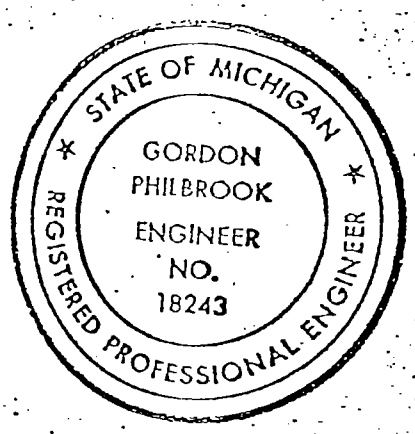
The nine existing monitoring wells shall be sampled as required by the State.

XI. Record Keeping

A record will be kept of the pond location, size, amount of buried materials, well monitoring data, sample analyses data, and any other information required by the State.

SWS SILICONES CORPORATION
Gordon C. Philbrook

Gordon C. Philbrook



Envirnomental Control Coordinator
Professional Engineer
State of Michigan
9/26/80

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

(2)

January 11, 1982

Mr. Brian Reicks
Michigan Department of Natural Resources
Water Quality Division
District #1
9311 Groh Road
Grosse Isle, Michigan 48138

Dear Mr. Reicks,

This letter is to confirm my telephone call to you on January 11, 1982 concerning the Closure Plan for the old evaporation-settling pond (Black Lagoon).

You said you would pull out the file and notify Mr. Roy Schrameck about our request to obtain comments concerning the Pond Closure Plan, which was submitted to the Michigan DNR on September 26, 1980.

As I indicated to you, the recently renewed NPDES Permit, Part I, A-7, compliance schedule says that we shall submit a pond closure plan and obtain approval of the plan from the Chief of the Water Quality Division by March 31, 1982.

Therefore, we are anxious to proceed with this matter and would appreciate a prompt answer from the Michigan DNR.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 82-08, Certified

(3)

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

April 14, 1982

Mr. Roy Schrameck, District Engineer
Michigan Department of Natural Resources
Water Quality Division, District #1
9311 Groh Road
Grosse Ile, Michigan 48138

Dear Mr. Schrameck,

This letter is in answer to your letter of January 26, 1982 in which you requested additional information concerning the old evaporation pond, in order to evaluate our proposed Pond Closure Plan.

Table 1 attached is a summary of the pond sludge analyses for methyl chloroform in the raw sludge, the sludge leachate and the sludge/birm mix leachate.

We had problems getting a representative pond sample thru the ice and snow. We are now in the process of sampling the pond and we will send you the analyses around the end of April.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 82-93, certified

cc: J. Calamungi
T. J. Sayers

Table I

SWS SILICONES CORPORATION

Summary

Evaporation Pond Sludge Analyses; February 1982

Sample	Sample Location	% Methyl Chloroform(1)
A	NE Corner; N 1/2	18%
B	N Center; N 1/2	7.0%
C	Center; N 1/2	0.16%
D	W; N 1/2	2.5%
E	SE Corner; S 1/2	0.24%
Composite (2)	----	7.1%

(1) By chloroform extraction; then NMR

(2) Used weighted average based upon estimated volumes of sludge at each location. However, we skewed the composite to the high side, in order to get a better study of the effects of fixing with birm mix.

Sample	Sample Location	Leach Water; mg/l Methyl Chloroform
A	NE Corner; N 1/2	45 mg/l
C	Center; N 1/2	0.54 mg/l
Composite (2)	----	27 mg/l

Birm Mix Ratios		Leach Water; mg/l Methyl Chloroform
Sample A, 1 part	to 4 parts birm mix	0.10 mg/l
Composite, 1 part	to 2 parts birm mix	0.17 mg/l
Composite, 1 part	to 4 parts birm mix	0.09 mg/l

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

(4)

May 27, 1982

Mr. Roy Schrameck, District Engineer
Michigan Department of Natural Resources
Water Quality Division, District #1
9311 Groh Road
Grosse Ile, Michigan 48138

Dear Mr. Schrameck:

As requested in your letter of January 26, 1982, we are enclosing analytical information, from duplicate samples, of the old evaporation pond water. These were analyzed for DEHP, 1;1,1 trichloroethane, trichloroethylene, 1,2-t-dichloroethylene, 1,1-dichloroethane, ethylbenzene, tetrachloroethylene, and toluene.

The DEHP was analyzed on a separate sample, and showed an ND (< 20 micrograms/liter) level. However, we have not received a formal letter from Shrader labs, yet, on the DEHP results.

Based on this data, and also the fact that the NPDES parameter items, such as TSS, BOD and chlorides are also low, we would like to start discharging this pond water to the chemical sewer system at the rate of about 20,000 to 30,000 GPD.

As you know, this water would receive further treatment in the chemical sewer system. The discharge rate would be controlled so that there would be no risk of exceeding any NPDES parameters.

Any final Pond Closure Plan must include removal of the pond water as a preliminary step. Pond water removal would eliminate the hydraulic head over the pond sludge and would also allow the sludge to dry out, so that future treatment would be more effective.

This would be of great help in meeting our pond closure target date of September 30, 1982.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 82-138, certified

cc: J. Calamungi
G. L. Ford
B. McClellan
T. J. Sayers

FILE

bcc: L. R. Andre
L. C. Ausderau
J. M. Barancin
J. W. Lorenzen

SHRADER ANALYTICAL
&
CONSULTING LABORATORIES , INC.

PRIORITY POLLUTANT SUMMARY

CUSTOMER . . SWS SILICONES CORP DATE : 20-MAY-82
SAMPLE : 7361 SAMPLE# 56304

CONC. UNITS : MICROGRAMS/LITER LIMIT OF DETECTION : 2.

COMPOUND	CONC.	# IO
INTERNAL STANDARD AREA : 822.		
1,1,1-TRICHLORDETHANE	346.6	4
TRICHLORDETHYLENE	< 2	2
1,2-TRANS-DICHLORDETHYLENE	49.1	1
1,1-DICHLORDETHANE	346.5	3
ETHYLBENZENE	< 2	1
TETRACHLORDETHYLENE	< 2	3
TOLUENE	131.7	2

ND = NOT DETECTED

OTHER COMPOUNDS DETECTED

SCAN	IONS	COMPOUND NAME

SHRADER ANALYTICAL
&
CONSULTING LABORATORIES , INC.

PRIORITY POLLUTANT SUMMARY

CUSTOMER . . SWS SILICONES
SAMPLE : 7362 SAMPLE# X-56304 DATE : 20-MAY-82

CONC. UNITS : MICROGRAMS/LITER LIMIT OF DETECTION : 2.

COMPOUND	CONC.	# IO
INTERNAL STANDARD AREA : 1003.		
1,1,1-TRICHLORDETHANE	311.5	4
TRICHLORDETHYLENE	2.3	5
1,2-TRANS-DICHLORDETHYLENE	50.9	4
1,1-DICHLORDETHANE	307.9	3
ETHYLBENZENE	ND	
TETRACHLORDETHYLENE	< 2	5
TOLUENE	149.9	1

ND = NOT DETECTED

OTHER COMPOUNDS DETECTED

SCAN	IONS	COMPOUND NAME

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
CARL T. JOHNSON
E.M. LAITALA
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

HOWARD A. TANNER, Director

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

Water Quality Division
9311 Groh Road
Grosse Ile, Michigan 48138

July 26, 1982

Mr. Gordon C. Philbrook
Environmental Control Coordinator
SWS Silicones Corporation
Adrian, Michigan 49221

Dear Mr. Philbrook:

We have completed our review of your September 26, 1980 Closure Plan for the "Black Pond" and subsequent submittals of January 11, January 29, April 14 and May 27, 1982. Based on our review, we are approving your September 26, 1980 Closure Plan with the following conditions:

1. The sludge in the Pond shall be mixed with "birm mix" at a ratio of 1 part sludge to 4 parts "birm mix" prior to any backfilling rather than just adding "birm mix" on top of the existing sludge as depicted in Part III of your Plan and drawing 0-181. The "birm mix" shall be added to the existing sludge in a manner guaranteed to provide complete mixing.

2. The backfill materials and thicknesses specified in Part III, IV and V of your Plan shall be adjusted to provide a minimum clay cap thickness of 36 inches while still maintaining the final grade as specified in Part VIII of your Plan and shown on drawing 0-181.

3. All backfill materials shall be compacted as specified in your Plan with no single lift exceeding six inches.

4. As I discussed with you by telephone on July 15, 1982, the water in the Pond can be transferred to the Chemical Sewer for treatment and discharge through outfall 001 at a rate not to exceed 30,000 gpd and on a Monday through Friday only basis.

Based on the above conditional approval, your facility is hereby considered to be in compliance with Part I.C.4.a. of NPDES Permit MI0026034.

MICHIGAN
THE GREAT LAKE STATE

issued to SWS Silicones Corporation on December 21, 1981. If you should have any questions pertaining to this correspondence, please contact me at (313) 675-0860.

Yours truly,

WATER QUALITY DIVISION

Robert J. Courchaine
Division Chief

Roy E. Schrameck

By: Roy E. Schrameck, P.E.
District Engineer

RJC:RES/sc

cc: Bill Iversen
Scott Ross
John Bohunsky/WQD files

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

(b)

October 21, 1982

Chief Engineer
State of Michigan
Department of Natural Resources
Water Quality Division
P.O. Box 30028
Stevens T. Mason Building
Lansing, Michigan 48909

Re: SWS SILICONES CORPORATION
NPDES Permit MI0026034

Gentlemen:

This letter concerns Special Condition Number Seven (7) of our NPDES permit, and is a final report and confirmation of the sludge fixation and closure of our old evaporation pond (Black Lagoon).

I am certifying in writing that the closure has been completed in accordance with the approved plan, which was submitted on September 26, 1980, with subsequent submittals of January 11, 1982, January 29, 1982, April 14, 1982, and May 27, 1982, and which was amended by a letter from Mr. Roy Schrameck of the MDNR, dated July 26, 1982.

Sincerely yours,
SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator
Professional Engineer
State of Michigan

GCP:NM 82-339 Certified
cc: R. Schrameck, DNR, Dist. #1 Certified
J. Calamungi
T. J. Sayers (Westport)
W. P. Pagano (Westport)

bcc: L. C. Ausderau (A/R file)
J. M. Barancin
G. L. Ford (Westport)
T. Helfgott, (Dobbs Ferry)
H. Kim
B. McClellan (Westport)
G. H. Meyer (Meyer & Kirk)
G. R. Wolf

STATE OF MICHIGAN
GORDON PHILBROOK
ENGINEER NO. 18243
REGISTERED PROFESSIONAL ENGINEER

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

October 31, 1983

RECEIVED
NOV 3 1983
WASTE MANAGEMENT BRANCH

Mr. Allen A. Debus
United States Environmental Protection Agency
Region V
RCRA Activities, Part B Permit Application
Technical, Permits and Compliance Section
230 South Dearborn Street
Chicago, Illinois 60604

Re: RCRA Part B Application
SWS Silicones Corporation
EPA ID# MID075400671
5HW-13

Dear Mr. Debus:

In regards to your visit to our facility on October 13, 1983, this letter is to inform you that we have since caulked the pad-diking systems under the three storage tanks, T-101, T-105, and T-108. Evidently some of the expansion joint between the pads and diking walls had failed.

We used an RTV (Room Temperature Vulcanizing) silicone sealant, which would not be affected by the solvents, in case there was a spill inside the diked area. This material is also resistant to sunlight and cold weather.

If there are any other questions or concerns, please let us know.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 83-213, certified

cc: Mr. W. C. McIntosh, MDNR, Hazardous Waste Div.; certified
Mr. J. Calamungi

137-15

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

OCT 2 1 1983

DATE:

SUBJECT: Notes from RCRA Pre-permit Inspection of SWS Silicones in Adrian, Michigan, U.S. EPA ID# MID075400671

FROM: Allen A. Debus, State Technical Unit 3 Allen A. Debus, 10/21/83

TO: File

THRU: William E. Muno, Chief
State Technical Unit 3 WEM

On October 13, 1983, Mr. Allen A. Debus of U.S. EPA, and Bob Basch and Chad McIntosh of the Michigan Department of Natural Resources (MDNR) met with Joe Calimungi, Gordon Philbrook, and Haik Kim of SWS Silicones (SWS) for the purposes of conducting a RCRA pre-permit inspection. The hazardous waste container and tank storage areas were inspected. Additionally, the juxtaposition of the Raisin River which flows on the property, and an inactive surface impoundment were observed.

The container storage area was observed to have been placed out-of-doors on a concrete secondary containment area. The 8 inch thick concrete surface had not been epoxy-sealed, but had a diked area 3 to 4 feet high which was sufficient to contain 800 drums according to U.S. EPA regulations. The concrete surface appeared free of holes or cracks. There were 150 drums present in the area stacked 3 pallets high. A 2 feet 8 inch high ramp led into the area. The sump was closed as is normally the practice. After a daily inspection it is opened to drain any rainwater that has collected. The drained water is passed to the chemical sewer system which is then discharged under an NPDES permit.

The inspectors observed that there was 2 to 3 inches of water present on the containment area. The drums were labeled as "hazardous waste", and appeared to be in good condition. Although there were no warning signs placed around this area, SWS personnel indicated that the appropriate signs were placed about the perimeter of the facility and that the facility was managed in conformance with 40 CFR Part 264.14. Since the drums closest to the east wall of the containment area were stacked six to seven feet above the rim of the dike, it was recommended that the 3rd level pallet closest to the wall be removed and placed elsewhere, so that a fork-truck wouldn't accidentally knock drums out of the containment area onto the adjacent field.

Three tanks were observed in the hazardous waste tank storage area. Each one had its own secondary containment area to conform with MDNR rules. The tanks were resting on a concrete surface and both the concrete and the tanks appeared to be in good condition. Overflow from the secondary containment area is routinely drained through a drainage system to the chemical sewer system. The joints between diking and concrete surfaces

137-13

were not entirely intact in some instances. It was indicated that several features of the tank that should have been inspected on a daily basis (40 CFR Part 265.194) were being inspected on a weekly basis instead.

The Raisin River flows onto the SWS property, although according to the MDNR (letter dated March 25, 1982), the 100-year flood elevation is approximately 46 to 51 feet below the active portion of the facility. The information called for in 40 CFR 270.18 regarding submittal of required information in the Part B application by owners/operators of facilities located in the 100-year floodplain does not exempt facilities whose active portion lies above the 100-year floodplain. SWS does not intend to use this portion of the facility for any constructive purpose and would be willing to address this in terms of a RCRA permit condition. Perhaps the proper procedure would be to request that SWS petition for exemption (if they want it) from the 40 CFR Part 270.18 requirement via the provisions of 40 CFR Part 260.20.

SWS also has an inactive surface impoundment on their property. At the present, U.S. EPA is not certain if it was used to treat/store or dispose hazardous wastes. Following is a brief historical outline of the recent history of the impoundment:

November - 1979	--	MDNR issues SWS a notice of violation due to groundwater contamination. SWS had violated their NPDES permit. The pond is unlined.
May - 1980	--	Discontinued use of the pond, no modifications effected, other than installation of groundwater monitoring wells.
Late - 1981	--	Closure plan approved by MDNR. A dike was constructed across the pond to allow evaporation on one side, but this was not successful.
July thru October, 1982	--	Closure effected through pond aeration and lime treatment, pumped out water which was then passed through chemical sewer system in conjunction with the SWS NPDES permit. A clay cap was added, and a top soil - grass cover added over the clay.

This writer spoke with Mr. Philbrook on October 17, 1983, and was informed that U.S. EPA must make a request in writing before SWS will send additional information regarding the surface impoundment. The U.S. EPA must do this in order to determine whether the SWS pond should have been regulated as a storage facility even though wastes were not added to it after November, 1980.

5HW-13:AADEBUS:ap:6-3731:10/19/83 (Disk #6)

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRE...
INITIALS	ap							
DATE	10/19/83	10/21/83			10/21/83			

5HW-13

SEP 2 9 1983

Mr. Joseph Calimungi
Director of Manufacturing
SWS Silcones Corporation
Sutton Road
Adrian, Michigan 49221

Dear Mr. Calimungi:

We have received your Resource Conservation and Recovery Act (RCRA) Part B permit application, and additional information dated July 28, 1983. The United States Environmental Protection Agency (U.S. EPA) has reviewed this material and has determined that your application is complete. Technical review of your application will begin shortly.

In accordance with 40 CFR Part 124.3, we reserve the right to request any additional information or to schedule a site visit if we feel that it is necessary to evaluate your application.

Please contact Mr. Allen A. Debus of my staff at (312) 886-3731, if you have any questions or need any assistance.

Sincerely yours,

William H. Miner, Chief
Technical, Permits and Compliance Section

137-1D

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMB DIR.
INITIALS	ap	AD						
DATE	9/29/83	9/27/83			9/27/83	9/28/83		

5HW-13:AADEBUS:ap:6-3731:9/27/83

OCT 4 1983

5HW-13

Mr. Alan J. Howard
Office of Hazardous Waste Management
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

Re: Hazardous Waste Part B
Permit Application
Facility U.S. EPA ID#: MID075400671
Facility Name: SWS Silicones Corporation

Dear Mr. Howard:

This is to inform you that with the receipt of additional information submitted to the United States Environmental Protection Agency (U.S. EPA) dated July 28, 1983, the Part B application for SWS Silicones Corporation is now considered complete. In accordance with the FY '83 Cooperative Arrangement, you are hereby requested to conduct a technical review of SWS Silicones' Part B application. This should be completed by November 15, 1983. If the State recommends issuance of the permit, please submit a draft permit and Statement of Basis as well within two months from the date of technical review completion.

Mr. Allen A. Debus of my staff shall also perform a technical review of the complete Part B application in order to gain familiarity with the facility's operations. This will facilitate his later review of your draft permit after it is completed. If you have any further questions regarding these matters, please contact Mr. Debus at (312) 886-3731.

Sincerely,

William H. Miner, Chief
Technical, Permits and Compliance Section

137-11

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIREC
INITIALS	ap							
DATE	10/4/83	10/4/83			10/4/83	10/4/83		

5HW-13:AADEBUS:ap:6-3731:9/30/83

INITIALS	PCRC	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WIMD CHIEF	WMC CHIEF
DATE								

SWS Silicones Corporation

ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

RECEIVED
AUG 03 1983
WASTE MANAGEMENT BRANCH

July 28, 1983

Mr. William H. Miner, Chief
Technical, Permits and Compliance Section
United States Environmental Protection Agency
Region V
230 South Dearborn St.
Chicago, Illinois 60604

Re: RCRA Part B Application
Notice of Deficiency,
SWS Silicones Corporation
EPA ID# MID 075400671
5HW-13

Dear Mr. Miner:

This letter is in answer to the Notice of Deficiency of our RCRA Part B application, which we received on July 7, 1983.

Please refer to the attached listing which was part of your letter to us.

Item 1. Attached are copies of updated page B-3, with the scale of miles.

Item 2. Attached are copies of the revised page, C-20, describing the special provisions for storing ignitable wastes, as per our telephone call to Mr. Allen Debus. (It was unnecessary to have a page C-21A).

Item 3. Also, as discussed on the telephone with Mr. Allen Debus, no hazardous waste is allowed to enter the Chemical Sewer system, which is used for NPDES treatment only. Attached are updated pages of D-5 which clarify this item.

Item 4. The maximum stress for the three storage tanks, and the vapor pressure and specific gravity of the stored bulk wastes, are shown in attached updated pages D-5 and D-5a.

Item 5. Attached are updated pages D-7, D-8, D-9, D-10 and D-12 with the certification stamp.

Item 6. Attached are updated pages D-11 and D-15 which discuss in more detail the measures used to prevent overfilling of the storage tanks.

Item 7a and 7c. Attached are updated pages F-5 and F-10 concerning weekly inspections of surrounding areas, and daily inspections of the overflow pipes and level gauges.

received
8-8-83

COPY 2

Item 7b. As discussed on the telephone with Mr. Allen Debus, the three tanks do not have temperature or pressure gauges, since these tanks are used at ambient temperatures and pressures, only.

Item 8. A date of closure has been estimated for the container storage pad. Attached is updated page I-1.

Yours truly,

SWS SILICONES CORPORATION

Joseph Calamungi

Joseph Calamungi
Director of Manufacturing

JC:pb 83-144-GCP, certified
Enclosures: 4 sets

cc: G. L. Ford
W. P. Pagano
G. C. Philbrook

ATTACHMENT FOR SWS SILICONES CORPORATION OF ADRIAN, MICHIGAN

U.S. EPA ID #MID075400671

1. The topographic map shown on page B-3 of the Part B application does not include a scale of miles. A revised page showing the scale of miles should be submitted.

2. A description of special provisions taken for storing ignitable wastes should be provided. This should appear after page C-21 in the Part B application.

3. You should supply additional information describing your "chemical sewer" referenced on pages D-4 and D-5 of the Part B application. Particularly, how will this system prevent the release of hazardous wastes that are spilled in the containment area?

4. What is the maximum stress allowed by API Standard 650 for Tanks T-105 and T-108, and by ASME Code Section VIII for Tank T-101? What is the vapor pressure and specific gravity of the wastes stored in each of the respective tanks?

5. In Section D, several technical drawings were submitted without the proper certification. This must be provided.

6. What controls or measures are used to prevent overfilling of each tank?

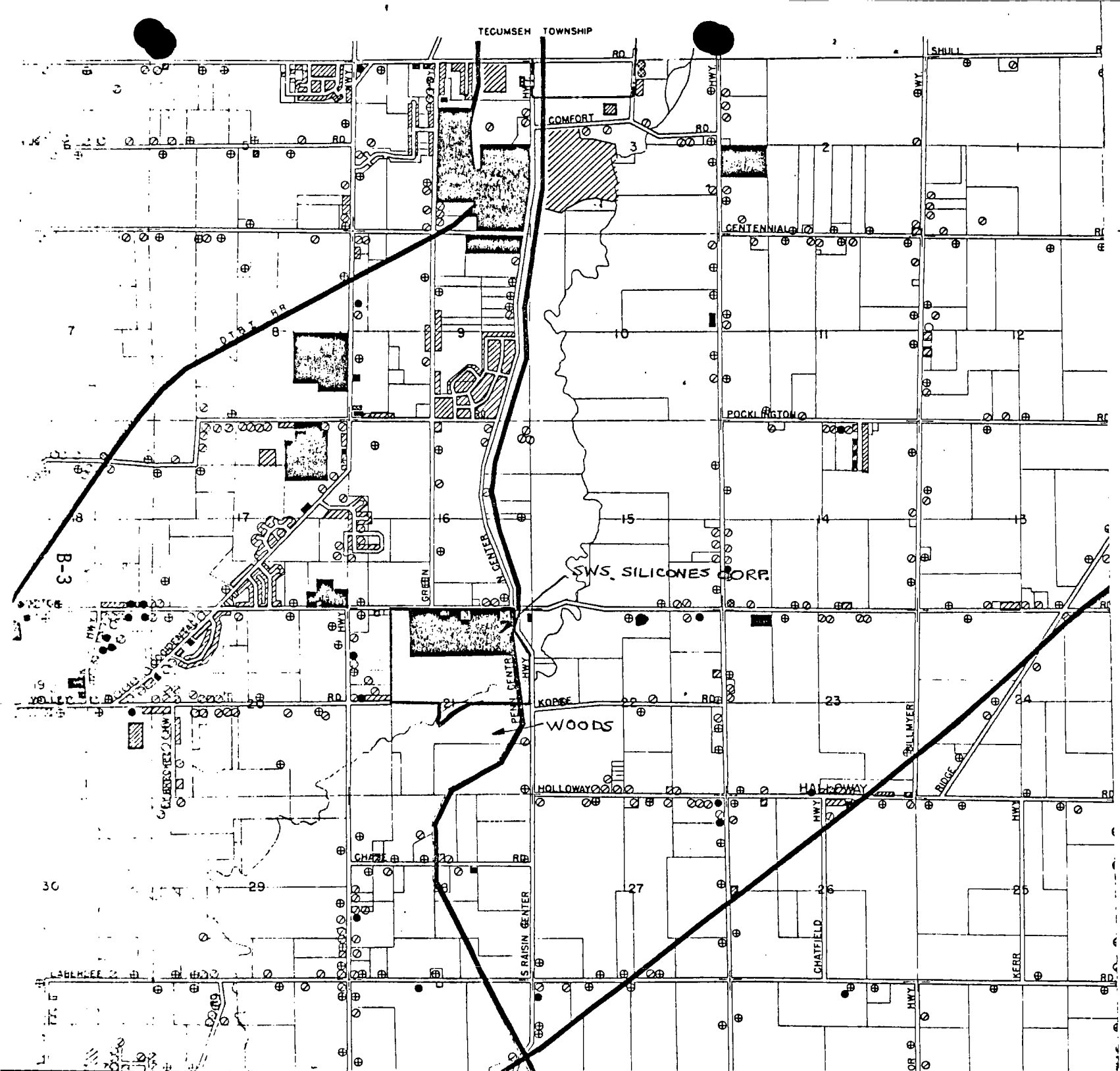
7. Your inspection log for tanks should be a modified to reflect the following activities:

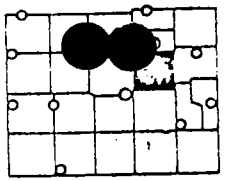
   a. The area surrounding each tank should be inspected at least weekly to detect signs of leakage.

   b. Data gathered from monitoring equipment (e.g. pressure and temperature gauges) must be inspected at least once each operating day to ensure that the tank is being operated according to its design.

   c. Tank overfilling equipment must be inspected at least daily to ensure that it is in good operating order.

8. You must provide an estimate for the date of closure for container storage to supplement your closure plan. This estimate may be based on the postulated working life of the containment area.





RAISIN TOWNSHIP

N

SCALE

1 MILE

LAND USE 1974

L E G E N

- FARMSTEAD
- SINGLE FAMILY
- TWO FAMILY AND MULTIPLE DWELLI
- MOBILE HOME
- LOCAL COMMERCIAL
- GENERAL COMMERCIAL
- LIGHT INDUSTRIAL
- HEAVY INDUSTRIAL
- RAILROAD
- TRANSPORTATION - UTILITIES, ETC.
- PARKS AND RELATED
- PUBLIC AND SEMI-PUBLIC
- WATER

Submitted
Date: 05/31/83
Revision No.: 01
7/28/83
B
Figure 8

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
ROBERT HOLMES
E. M. LAITALA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
James F. Cleary, Acting Director

July 15, 1983

Mr. William H. Miner, Chief
Technical, Permits & Compliance Section
U.S. EPA-Region V
230 South Dearborn
Chicago, Illinois 60604

Re: SWS Silicones Corporation
MID 075400671

Dear Mr. Miner:

The Part B Application for SWS Silicones Corporation has been reviewed for completeness.

The review checklist was completed and the response letter was drafted well within the time frame of the Cooperative Agreement which was noted in your 6/7/83 letter to Alan Howard. On July 8, we received your July 1, notice of deficiency to SWS Silicones. We concur, in general, with the notice of deficiency.

The deficiency comments appear to be of a technical nature rather than a completeness check. The review checklist that is enclosed represents only a completeness review. The technical review will begin after the application is determined to be complete.

Please send a second Part B Application. Contact me at (517) 373-2730, if you have questions.

Sincerely,

W. C. McIntosh, Engineer
Permit & Licenses Unit
Hazardous Waste Division

RECEIVED
WASTE MANAGEMENT BRANCH
COPY

Enclosure
cc: J. Traub, U.S. EPA
R. Lundgren

RECEIVED 7-25-83

R1026

JUL 0 1 1983

[illegible]-13

Mr. Joseph Callewaert
SKS Siliconex Corporation
Sutton Road
Adrian, Michigan 49221

RE: Notice of Deficiency
Facility at Sutton Road
Adrian, Michigan
EPA ID# MIDO76400671

Dear Mr. Callewaert:

Pursuant to Section 3005 of the Resource Conservation and Recovery Act (RCRA), as amended and Code of Federal Regulations 40 CFR 270.10, 270.14 through 270.29, and 124.3, my staff has completed an initial review of your Part B Application for an RCRA permit to treat and store hazardous waste. The purpose of this initial review is to check for completeness of your permit application against a list of required information delineated on pp. 2989-2991, FR 46, January 12, 1981.

As a result of this review, we found that your application is incomplete because it is deficient in several areas. You will be notified that the application is complete after you have corrected these deficient areas described in an attachment to this letter. The due date for the submittal of such information is September 1, 1983. However, you are encouraged to submit to us this information at your earliest convenience.

In reviewing your application for completeness, we have found areas where clarifications or supplemental information are needed for our review. We are, therefore, requesting that copies be provided in quadruplicate to us for review. Please note that requests of this type do not affect the status of your application.

Our Agency intends to work closely with the Michigan Department of Natural Resources (MDNR) in processing your Part B application. We will forward copies of all material submitted to the MDNR.

7/1/83

137-6

Again we are committed to conducting the RCRA permitting process as promptly and efficiently as possible. Please feel free to contact Mr. Allen A. Debus of my staff at (312) 886-3731 if you have any questions regarding this review.

Sincerely yours,

William N. Miner, Chief
Technical, Permits and Compliance Section

Attachment

cc: Alan J. Howard
Michigan Department of Natural Resources

bcc: Joe Boyle (SIO)
Jodi Traub (SS)

INITIALS / DATE	TYPIST	AUTHOR	SRW #1 CHIEF	SRW #2 CHIEF	SRW #3 CHIEF	TPS CHIEF	WWB CHIEF	W... DIR...
	6/29/83	AD	6/29/83		for 6/29/83	7/1/83		

5HW-13:ADebus:THaywood:6/28/83

ATTACHMENT FOR SWS SILICONES CORPORATION OF ADRIAN, MICHIGAN

U.S. EPA ID MID075406867

1. The topographic map shown on page B-3 of the Part B application does not include a scale of miles. A revised page showing the scale of miles should be submitted.

2. A description of special provisions taken for storing ignitable wastes should be provided. This should appear after page C-2(1) in the Part B application.

3. You should supply additional information describing your "chemical sewer" referenced on pages B-5 and B-6 of the Part B application. Particularly, how will this system prevent the release of hazardous wastes that are spilled in the containment area?

4. What is the maximum stress allowed by API Standard 650 for Tanks T-105 and T-106, and by ASME Code Section VIII for Tank T-101? What is the vapor pressure and specific gravity of the wastes stored in each of the respective tanks?

5. In Section D, several technical drawings were submitted without the proper certification. This must be provided.

6. What controls or measures are used to prevent overfilling of each tank?

7. Your inspection log for tanks should be modified to reflect the following activities:

   a. The area surrounding each tank should be inspected at least weekly to detect signs of leakage.

   b. Data gathered from monitoring equipment (e.g. pressure and temperature gauges) must be inspected at least once each operating day to ensure that the tank is being operated according to its design.

   c. Tank overfilling equipment must be inspected at least daily to ensure that it is in good operating order.

8. You must provide an estimate for the date of closure for container storage to supplement your closure plan. This estimate may be based on the postulated working life of the containment area.

should also have a vacuum relief valve.

5HW-13

JUN 7 1983

Mr. Alan J. Howard
Hazardous Waste Division
Michigan Department of Natural
Resources
P.O. Box 30028
Lansing, Michigan 48909

Facility EPA ID #: MID 075400671
Facility Name: SWS Silcones Corp.
Facility Address: 3901 Sutton Road
Adrian, Michigan

Dear Mr. Howard:

Enclosed is one copy of the Part B application and correspondence for the above referenced facility.

Your agency is requested to perform a completeness check of the application, prepare comments and draft a deficiency letter if appropriate. Please forward the filled-in checklist, review comments, and draft letter to this office by July 15, 1983. This will allow my staff 2 weeks to review the comments and issue the letter before expiration of the allotted 60 day review period.

Please contact Mr. Allen A. Debus, the responsible U.S. EPA person at 312/886-3731, if you have any questions regarding the application.

Sincerely yours,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

bcc: Joe Boyle, (SIO)
Jodi Traub, (SS)

5HW-13:ADEBUS:ap:6-3731:6/3/83

137-4

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECT
INITIALS	ap	AD			WEG	LGH		
DATE	6/6/83	6/6/83			6/6/83	6/6/83		

Error 6/6/83

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
E. M. LAITALA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES
STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
HOWARD A. TANNER, Director

Chad McIntosh MDNR

May 30, 1983

January 20, 1983

RECEIVED
JAN 24 1983
WASTE MANAGEMENT BRANCH
EPA, REGION V

Mr. Allen DeBus
U. S. Environmental Protection Agency
Region V
111 West Jackson Boulevard
Chicago, Illinois 60604

Re: Service No. 8203 119
River Raisin
NE¼, Section 21, T 6 S, R 4 E
Raisin Township
Lenawee County

Dear Mr. DeBus:

I have been asked by Mr. Philbrook of SWS Silicones Corp. to explain our flood estimate of 721, USGS datum at the above location. Enclosed is a copy of the U.S.G.S. gage data for that area.

From the gage data, note the gage datum is elevation 707.0. The flood of record occurred in June, 1968 with a discharge of 2,900 cfs and a resulting stage of 12.66 feet (elevation 719.66). The gage is directly across the river from SWS Silicones and all data are directly applicable.

The 100-year frequency flood discharge has been calculated by this office at 4,090 cfs. We estimate this would produce a stage of approximately 14 feet, or elevation 721.0. We know from other areas on the River Raisin that flood discharges for the 100-year flood raise stages by about 9 to 10 feet over normal water elevations. This agrees very closely with known water surface elevations at this site of zero flow stage equal to 709.1 and normal flow stage equal to 711.7.

Since SWS Silicones' plants are located at elevations 767 and 772, from 46 to 51 feet above expected flood stage, they are obviously well above any expected flood levels. To require their company to perform a detailed analysis of the riverine system would be very expensive and produce

137-2

results refining the flood elevation by only a matter of tenths of a foot.

Should you have any further questions in this regard, please feel free to contact me (517/373-3930).

Sincerely,

Wallace A. Wilson, P.E., Chief
Flood Hazard Regulation
Water Management Division

WAW:cjs

Enclosure: Gage record

cc: G. C. Philbrook

9-197
(Nov. 1954)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

File No. { Washington 4-1757.0
Field .....

Description Prepared 9-12-56 (Date)
by A. J. Quigley
Revised by D. E. Bower 11-19-62

Description of Gaging Station on River Raisin near Tecumseh, Michigan

(Prepare description in accordance with outline on back of Form 9-277. Plot cross section to scale. Use Form 9-213A or 9-213E for cross section. Use second page of this form for sketch if room is available, otherwise use Form 9-213C or 9-213H. Initial and date all sheets.)

16—58615-2 GPO

Location.--Lat 41°56'35", long 83°56'45", in NE¼ sec. 21, T. 6 S., R. 4 E., on right bank, 12 ft downstream from bridge on N. Raisin Cen. Highway, and 4.5 miles south of Tecumseh.

To reach gage from - Tecumseh - At signal light at W. Chicago and South Evans, go south on South Evans 4.5 miles to bridge and gage. (South Evans changes to N. Raisin Cen. Road at city limits).

Established.--Sept. 7, 1956 by A. J. Quigley.

Drainage area.--266 square miles.

Gage.--An F & P digital and a Stevens A 35 recorder in concrete block house and well. Outside gage is wire weight gage located on downstream side of bridge which is 12 ft upstream from gage house. Inside gage is enamel staff gage plate reading from 0 to 16.86 and fastened to downstream wall of well. Reference gage is electric tape gage set on instrument shelf to left of recorder. Well is equipped with three 2-inch intakes the 2 bottom ones of which are connected by 3-way valves to 3 cu ft tank for flushing.

Gage elevations of pertinent parts are as follows:

Bottom of well	0 feet
Lower intake, river end	.6 "
Lower intake, well end	1.2 "
Middle intake, river end	1.9 "
Middle intake, well end	2.2 "
Upper intake, river end	2.7 "
Upper intake, well end	3.2 "
Sub-floor	7.3 "
Floor of House	14.1 "
Instrument shelf	17.00"
ETG index	17.008"
Check bar	17.37"

Datum of gage is 707.0 feet above mean sea level, datum of 1929.

History.--Recording gage started on River Raisin near Adrian about 5.5 miles downstream in October 1953 and has been operating continuously since.

A Stevens recorder operated in present house until Nov. 15, 1962 when the digital recorder was installed.

This document paid for with State funds

Channel and control.--Channel and streambed are of mud, sand and small gravel. Main channel is confined to small valley about 1000 ft wide which is generally about 40 ft below surrounding countryside. River wanders throughout valley floor. Both banks are fairly low and covered with small trees and brush. Overflow starts on right bank at about gage height 7 ft. Channel is straight for 50 feet above and 300 feet below station.

Low-water control is gravel riffle 200 ft below gage and is believed to be fairly permanent.

High-water control is channel and extreme high water is probably railroad bridge abutments 225 ft below gage.

Discharge measurements.--Low-water measurements can be made by wading on control or at almost any section from bridge to 300 ft above bridge up to a stage of about 5.5 ft. High-water measurements can be made from highway bridge 12 ft above gage. Both handrails of bridge are marked with single paint stripe every 5 feet to 40 feet and then every 2 feet to 90 feet. Numerals are painted next to stripe every 10 feet. Initial point is at right bridge abutment.

Floods.--A discharge of 1200 cfs occurred on Mar. 7, 1959 at a gage height of 10.33 ft.

Point of zero flow.--2.1 ft Sept. 10, 1956, probably shifting.

Winter flow.--Stage discharge relation probably affected by ice during extreme cold weather.

Regulation and diversion.--Diurnal fluctuation caused by municipal power-plant at Tecumseh 5.5 miles upstream. A number of other small dams further upstream may have slight effect upon flow.

Accuracy.--Conditions for obtaining gage-height record are excellent. Conditions for measuring discharge are excellent at low stages and fair at high stages due to varying angles.

Cooperation.--City of Adrian, State of Michigan Water Resources Commission.

Sketch.--

Photographs.--In district files.

Reference marks.--RM 1 is chiseled cross on 19th rivet below bridge nameplate in downstream row of rivets at right downstream end of bridge. Elevation 16.116 ft., gage datum.

RM 2 is chiseled cross in I beam encased in right downstream bridge abutment at right edge of gage house walkway. Elevation 14.066 ft., gage datum.

RM 3 is ½" machine bolt in 18" diameter tree 5 ft north of gage house. Bolt is 18" above ground in north side of tree. Elevation 11.535 ft., gage datum.

SWS Silicones Corporation
ADRIAN, MICHIGAN 49221 • TELEPHONE (517) 263-5711

December 23, 1982

Chief Engineer
State of Michigan
Department of Natural Resources
Water Quality Division
P. O. Box 30028
Stevens T. Mason Building
Lansing, Michigan 48909

Re: SWS Silicones Corporation
NPDES Permit MI 0026034

Gentlemen:

This letter concerns Special Condition Number Six (6) of our NPDES permit, and is a report summarizing our findings of the DNR-approved Phase II Hydrogeologic Study Plan for the old evaporation-settling pond.

Please note that the pond has been out of service since May, 1980. The pond has since been drained, closed, and capped in accordance with the DNR-approved plan, and in compliance with Special Condition Number Seven (7) of our NPDES permit.

The following information is enclosed:

1. Gilbert/Commonwealth report entitled "Permeability Testing of OW-Series Observation Wells for SWS Silicones Corporation, Adrian, Michigan".
2. Gilbert/Commonwealth report entitled "Ground Water Flow Beneath the Sealed Evaporation and Settling Basin at SWS Silicones Corporation, Adrian, Michigan".
3. Summary Table of Well analyses for June 9, July 21, and August 11, 1982.
4. Inter-office memo from B. S. McClellan, dated December 20, 1982, entitled "Estimate of Mass Loading, Phase II Hydrogeologic Investigation, Evaporation and Settling Basin, Adrian".

This report concludes our study of the evaporation-settling pond portion of the Phase II Hydrogeological Investigation.

Yours truly,

SWS SILICONES CORPORATION

Gordon C. Philbrook

Gordon C. Philbrook
Environmental Control Coordinator

GCP:pb 82-377, certified

cc: R. Schrameck, MDNR, District #1, certified
J. Calamungi

bcc: J. M. Barancin
G. L. Ford
H. Kim
B. S. McClellan
G. H. Meyer; Meyer & Kirk
T. J. Sayers
G. R. Wolf

Stauffer CHEMICALS

INTER-OFFICE CORRESPONDENCE

Westport

Adrian

B.S. McClellan
Sr. Hydrogeologist

12/20/82

G.C. Philbrook

J. Calamungi
G.L. Ford
D. McGrade
T.J. Sayers

Estimate of Mass Loading, Phase II Hydrogeologic Investigation, Evaporation and Settling Basin, Adrian

This report presents an estimate of mass loading from the basin to the river. This estimate is based on my review of the information obtained during the Phase II Hydrogeologic Investigative work performed in regards to the now closed Evaporation and Settling Basin. Specifically I have reviewed two reports by the outside contractor Gilbert/Commonwealth.

1. Report No. 1 - Permeability Testing of OW-Series Observation Wells For SWS Silicones Corporation

2. Report No. 2 - Ground-Water Flow Beneath the Sealed Evaporation and Settling Basin at SWS Silicones Corporation, Adrian, Michigan

Also reviewed were the results of chemical analysis performed by SWS Silicones Corporation on samples collected from the nine observation wells on June 9, 1982, July 21, 1982 and August 11, 1982.

The purposes of this work has been to obtain the information needed to estimate the mass loading (in pounds per unit time) to the river from the basin area via ground-water discharge from the "Perched and Near Surface Aquifers." Based on the work conducted the estimated cumulative total mass loading for the chlorinated organic chemicals analyzed was 0.502 pounds per day from the "Perched Aquifer" and 0.003 pounds per day from the "Near Surface Aquifer." Ground-water in the "Perched Aquifer" (shallow) discharges along the upland slope to the floodplain swampy area and from the "Near Surface Aquifer" (deeper) to the floodplain swampy area and the River Raisin.

Discussion of Methods Used

Ground-Water Discharge Rate: The ground-water discharge rate was determined by Gilbert/Commonwealth for both the "Perched Aquifer and Near Surface Aquifer." In order to accomplish this it was necessary to determine the in-site permeability of the soil contained in each saturated zone and construct a structural/hydrogeologic model of the site from which the dimensions of ground-water flow could be determined. The work performed and conclusion reached are described at depth in Reports No. 1 and No. 2. In Report No. 2 Gilbert/Commonwealth has presented a discharge rate of 3359 gpd for the "Perched Aquifer" and 2558 gpd for the "Near Surface Aquifer." These discharge rates represent the volume of ground water per unit time that will pass through a cross-sectional area situated downgradient of the basin and are representative of flow in the aquifers beneath the basin.

SAFEGUARD COMPANY INFORMATION

Chemical Analysis: Ground-water samples from the existing OW-Series wells were analyzed by SWS Silicones for the proposed list of chemicals. Samples were collected on June 9, 1982, July 21, 1982 and August 11, 1982. Using the analytical results from wells 1S, 1D, 4S and 4D (S-perched aquifer and D-near surface aquifer) an average concentration for each chemical in ground-water downgradient from the basin in each aquifer was obtained. Table 1 shows the actual analytical results for each compound, on each date sampled, for the downgradient wells and the average concentration obtained.

TABLE 1

Perched Aquifer

Chemical - mg/L	Well No./Date Sample						Average Concentration Mg/L
	1S			4S			
	6/9	7/21	8/11	6/9	7/21	8/11	
TOC	30	900	1000	20	34	360	390.7
Hydrolyzable (Ionic or Non-Organic) Chlorides	950	1600	2157	1280	1390	1978	1559.2
1,1,1-Trichloroethane	3.7	5.5	6.9	3.0	2.5	3.6	4.2
1,1-Dichloroethane	17.0	28.0	36.0	N.D.	0.4	0.35	13.6
t-1,2-dichloroethylene	N.D.	N.D.	N.D.	0.8	0.03	0.03	0.14
Di-n-butyl phthalate	$\leq$ 0.025	--	--	N.D.	--	--	0.013

TABLE 1 - (Continued)

Near Surface Aquifer

Chemical - mg/L	Well No./Date Sampled						Average Concentration mg/L
	1D			4D			
	6/9	7/21	8/11	6/9	7/21	8/11	
TOC	13	--	100	8	8	11	28.0
Hydrolyzable (Ionic or Non-Organic) Chlorides	855	--	1180	273	235	249	558.4
1,1,-Trichloro-ethane	0.13	--	0.12	0.08	0.06	0.18	0.11
1,1-Dichloro-ethane	N.D.	--	N.D.	N.D.	N.D.	N.D.	N.D.
t-1,2-Dichloro-ethylene	N.D.	--	N.D.	0.04	0.05	0.16	0.05
Di-n-butyl phthalate	N.D.	--	--	N.D.	--	--	N.D.

Mass Loading Determination: Using the average concentration for each compound (mg/L) in each aquifer and the discharge rate for each aquifer (Liters/day) an estimate of the mass loading for each compound (pounds per day) in each aquifer was obtained. The results of this determination are presented in Table 2 along with the cumulative totals for chlorinated organics. It is important to note that in making this determination no consideration was given to the attenuative capabilities of the water bearing soils or the hydrolytic stability of the compounds involved. Therefore, the results presented here should be viewed as a worst case situation and the actual amounts of the observed compound reaching the discharge areas could be significantly less.

TABLE 2

Mass Loading Determination Lb./day

Compound	Perched (Shallow) Aquifer	Near Surface (Deeper) Aquifer
TOC	10.9	0.6
Hydrolyzable (Ionic or Non-Organic) Chlorides	43.6	11.9
1,1,1-Trichloro-ethane	0.118	0.002
1,1-Dichloro-ethane	0.380	N.D.
t-1,2-Dichloro-ethylene	0.004	0.001
Di-n-butyl Phthalate	< 0.001	N.D.
Chlorinated Organics Cumulative Totals	0.502	0.003

Conclusions

1) I believe that the representation of hydrogeologic conditions presented by Gilbert/Commonwealth are reasonably accurate. Furthermore, because of the relatively high permeability values used for the type of materials described and the recent elimination of the Evaporation and Settling Basin as a source of recharge, I believe that the ground-water discharge rates presented are on the high side. Based on this I do not predict significantly higher values for discharge than those used here.

2) Given that the Evaporation and Settling Basin is now closed and caped the mass loading determinations presented here should be considered a high point. The elimination of the basin as a potential source of recharge to the "Perched Aquifer" should result in a reduction of mass loading values presented here.

3) When considering the mass loading values presented here it is important to keep in mind that this discharge does not occur from a point source but is spread out over a significant area as shown on Figure 5 and 6 of Report 2 by Gilbert/Commonwealth. Also discharge is not directly to the river but to a swampy area and it is questionable as to how much if any of the estimated mass loading reaches the river.

If you have any questions please call.

B.S. McClellan

BSM005:dm

SWS SILICONES CORPORATION

TABLE I

Old Evaporation Pond, Well Analyses

For June 9, July 21 and August 11, 1982

mg/l

Well #	T.O.C. 6/9	T.O.C. 7/21	T.O.C. 8/11	Chloride 6/9	Chloride 7/21	Chloride 8/11	di-n-butyl-phthalate 6/9
1S	30	900	1000	950	1600	2157	≤ 0.025
1D	13	100	(1)	855	1180	(1)	ND(2)
2S	29	28	24	440	410	547	ND(2)
2D	5	(1)	(1)	240	(1)	(1)	≤ 0.030
3S	14	13	14	190	400	537	ND(2)
3D	5	7	6	174	250	239	≤0.025
4S	20	34	360	1280	1390	1978	ND(2)
4D	8	8	11	273	235	249	ND(2)
5	14	16	18	370	370	403	ND(2)

Well #	1,1,1 trichloroethane 6/9	1,1,1 trichloroethane 7/21	1,1,1 trichloroethane 8/11	t-1,2-dichloroethylene 6/9	t-1,2-dichloroethylene 7/21	t-1,2-dichloroethylene 8/11	1,1 dichloroethane 6/9	1,1 dichloroethane 7/21	1,1 dichloroethane 8/11
1S	3.7	5.5	6.9	ND	ND	ND(3)	17	28	36
1D	0.13	0.12	(1)	ND	ND	(1)	ND	ND	(1)
2S	0.25	0.40	0.61	0.74	0.65	0.67	ND	ND	0.01
2D	ND	(1)	(1)	ND	(1)	(1)	ND	(1)	(1)
3S	0.30	1.0	1.7	ND	ND	0.01	ND	ND	0.01
3D	ND	ND	ND	ND	ND	ND	ND	ND	ND
4S	3	2.5	3.6	0.80	0.03	0.03	ND	0.40	0.35
4D	0.08	0.06	0.18	0.04	0.05	0.16	ND	ND	ND
5	0.25	0.20	0.31	0.14	0.25	0.40	ND	ND	ND

(1) Insufficient water for sampling.

(2) Detection limit about 0.02 mg/l.

(3) Detection limit about 1.0 mg/l in this sample.

(4) Other ND (None Detected) limits about 0.01 mg/l.

G. C. Philbrook
12-22-82

DEC 16 1982

5HW-TUB

Mr. Joseph Calimungi
Director of Manufacturing
SWS Silicones Corporation
Sutton Road
Adrian, Michigan 49221

RE: MID075400671 ✓

Dear Mr. Calimungi:

By now you should have received our letter requesting submittal of the Hazardous Waste Permit Application, Part B, for the above referenced facility.

A guidance document has been prepared for the use of hazardous waste management facilities in the preparation of their permit applications. A copy of that document is enclosed for your use.

A one-day workshop/seminar for Part B applicants is being scheduled for January 10 and 11, 1983. You will be further advised of the time and location as soon as arrangements have been made.

In the meantime, please contact me at (312) 886-3731, if you have any questions.

Sincerely yours,

Allen A. Debus
Permit Contact
Technical, Permits, and Compliance Section

Enclosure

cc: Alan J. Howard, Chief
Office of Hazardous Waste Management
Michigan Department of Natural Resources

5HW-TUB:ADebus:THaywood:12/16/82

DEC 2 1982

5HW-TUB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Joseph Callaughi
Director of Manufacturing
SWS Silicones Corp.
Sutton Road
Adrian, Michigan 49221

RE: SWS Silicones Corp.
Sutton Road
Adrian MI 49221
MID078409067

Dear Mr. Callaughi:

By now you should have received an acknowledgement of our receipt of the Part A permit application material for the above-referenced hazardous waste facility under the Resource Conservation and Recovery Act (RCRA) permit program.

Accordingly, this letter constitutes the next step in the formal process leading toward issuance or denial of an RCRA permit. Under the authority of 40 CFR 122.22, this is a formal request for submittal of Part B of the permit application for the above-referenced facility.

Enclosed is a copy of 40 CFR 122.25 which lists the items required for submitting the Part B permit application for the facility. The Part B application must be submitted in quadruplicate and postmarked no later than May 31, 1983. Please uniquely number each page of the application including all attachments (maps, specifications, etc.). A certification statement identical to one stated in 40 CFR 122.6(d) must accompany the application and all additional submittals. Send your application to the following address:

RCRA ACTIVITIES
Part B Permit Application
U.S. EPA, Region V
P.O. Box 88587
Chicago, Illinois 60680-8587

We are committed to conducting the RCRA permit process as efficiently as possible. Consequently I suggest you contact Mr. Allen Debus of my staff, at (312) 886-7931, as you begin preparing your application. Mr. Debus will be available to discuss specific needs of your application or to meet with you in Chicago. These efforts are intended to generate complete applications, without requiring any information beyond that which is necessary to make RCRA permit decisions.

Failure to furnish the complete Part B permit application by the above date, and to provide in full all required information, is grounds for termination of interim status under 40 CFR 122.22.

Information you submit in the Part B permit application can be disclosed to the public, according to the Freedom of Information Act and U.S. Environmental Protection Agency (U.S. EPA) Freedom of Information regulations. If you wish, however, you may assert a claim of business confidentiality by printing the word "Confidential" on each page of the application which you believe contains confidential business information. U.S. EPA will review business confidentiality claims under regulations at 40 CFR Part 2, and will later request substantiation of any claims. Please review these rules carefully before making a claim.

If you claim parts of the application as confidential, please provide us with a public information copy of the application. The public information copy must be identical to the full application with the exclusion of the confidential information.

We have also enclosed a copy of 40 CFR Part 264 which includes technical standards for the operation of treatment and storage facilities. These standards will become applicable upon issuance of an RCRA permit to your facility by U.S. EPA.

We will coordinate review of the application with the Michigan Department of Natural Resources, and if the application is acceptable, will strive for a simultaneous issuance of Federal and State hazardous waste facility permits. It is possible that during the processing of the application, the State hazardous waste program may become authorized to issue RCRA permits for your type of facility. In that case, direct Federal processing will cease, and the State in lieu of U.S. EPA will make the final determination on your application.

We look forward to receiving your Part B permit application.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosures: 40 CFR 122.25
40 CFR 264

cc: L. B. Bruner
Vice-President and General Manager
SWS Silicones Corp.
Sutton Road
Adrian, MI 49221

Al Howard, MDNR

bcc: Allen Debus
Part B file

INITIALS	TYPIST	AUTHOR	P.E.U.	STU #1	STU #2	TPCS	WMD CHIEF	WMD DIR.	RA
DATE	11/30/82		11/29/82			11/30/82			

5HW-TUB:ADebus:THaywood:11/29/82

PART B DOCKET LOG

Please print

Facility SWS Silicone

I.D. # MID 075 400 671

Item No.	Item Date	Description	Item Filed*
137-47	7/17/84	News Release	see 6
137-48		Radio Broadcast Announcement	6
137-49	6/4/84	Comment: Klepitsch, from Bigelow MI Dept of State	6
137-50	6/6/84	Comment: Ohm, from Guenther MDNR	6
137-51	5/25/84	Certificate of Mailing	6
137-52		Mailing List (w/ inapplicable names crossed out)	6
137-53	8/1/84	Memo: Ohm to Dehn	6
137-54	8/10/84	Memo: Christensen to Klepitsch	6
137-55	9/7/84	Letter U.S.EPA to Calamunci	2
137-56	9/7/84	Responsiveness Summary and Sign off page	6
137-57	7/2/84	News Release (finalized copy of 137-47)	6
137-58			

*Folder 1 is arranged by section.

PART B DOCKET LOG

Please print

Facility SWS Silicones

I.D. # MID 075 400 671

Item No.	Item Date	Description	Item Filed*
137-25	4/9/84	Note to File	3
137-26	4/6/84	Letter (w/attachment) McIntosh to Miner (+note)	2
137-27	4/11/84	Phone memo	3
137-28	4/19/84	Letter - Philbrook to Debus (w/attachment)	2
137-29	4/30/84	Note to Debus	3
137-30	5/2/84	Note to Berman	3
137-31	5/11/84	Memo: Christenson Fronklepitsch	#5
137-32	5/15/84	See 137-29 (typed copy of 137-29)	3
137-33	5/23/84	Memo to File (w/attachment)	4
137-34	7/24/84	Memo to File	4
137-35a	7/18/84	Letter Philbrook to Debus	2
137-35	7/24/84	Statement of Basis	5
137-36	7/25/84	Public Notice	6
137-37		Draft Permit	5
137-38	5/15/84	Public Voucher for Advertising	6
137-39a-d	5/21/84	Cover letters for public notice mailing	6
137-40	5/18/84	Requisition for Radio Broadcast [WQTE (FM)]	6
137-41	5/18/84	" " [WABJ (AM)]	6
137-42	7/3/84	Affidavit of Performance [WQTE (FM)]	6
137-43	7/5/84	" " [WABJ (AM)]	6
137-44	5/22/84	Cover letter to public library	6
137-45	7/13/84	Cover letter for PSA [WLEN (FM)]	6
137-46	7/13/84	" " " [WABJ + WQTE]	6

*Folder 1 is arranged by sections.

PART B DOCKET LOG

Please print

Facility SWS SILICONES CORP

I.D. # MID 075 400 671

Item No.	Item Date	Description	Item Filed*
137-1		LOG	
137-2	1/20/83	Letter w/attachment W. Wilson (MDNR) to A. Debus	See 2
137-3	6/7/83	Meeting Notes	See 4
137-4	6/7/83	Letter Miner to Howard	See 2
137-5	6/10/83	Completeness Check (U.S. EPA)	See 4
137-6	7/1/83	Notice of Deficiency	See 2
137-7	7/15/83	State Completeness Chk (State EPA)	See 4
137-8	7/28/83	SWS Silicones Letter to Miner (w/attachment)	See 2
137-9	8/30/83	Calculation of Shell Thickness	See 4
137-10	9/29/83	Letter Miner to Calimungi	See 2
137-11	10/4/83	Letter: Miner to Howard	See 2
137-12	10/13/83	Document received during Site inspection	See 2
137-13	10/21/83	Trip Report by Debus	See 3
137-13a	10/21/83	" " " " " yellow	See 3
137-14	10/25/83	Letter: Miner to Calimungi	See 2
137-15	10/31/83	Letter: Philbrook to Debus	See 2
137-16	11/22/83	Letter: (w/attachment) Calamungi to Miner	See 2
137-17	12/5/83	Note to File - Debus Re: Surface impairment	See 3
137-18	12/13/83	Letter: Miner to Howard	See 2
137-19	12/13/83	Letter: Miner to Calamungi	See 2
137-20	1/31/84	Note to File	See 4
137-21	2/1/84	Basis for excluding wastes	See 4
137-22	3/12/84	Letter (w/attachment) Philbrook to Debus	See 2
137-23	3/13/84	Note to file (w/attachment)	See 3
137-21a	2/3/84	Letter Philbrook to Debus	See 2
137-24	3/29/84	Letter (w/attachments) Philbrook to Debus	See 2

*Folder 1 is arranged by sections.

PART B (DOCKET) LOG
HSWA

Please print

Facility Wacker Silicones Corporation

ID # MID 075 400 671

Item #	Item Date	Description	Item Filed *
1	~~2~~	LOG	1
2	2/24/89	Environmental Screen	4
3	2/10/89	Letter: R TRAUB USEPA to Ken Burda MDNR	3
4	2/10/89	MEMO: R TRAUB EPA EPB to J. DIKINIS RERB MI/WI	3
5	3/10/89	Letter: USEPA DA.Dilnich, ADD to Wacker Silicones Gordon Philbrook	2

1

* Folder 1 is arranged by sections.

RCRA FINAL PERMIT SIGN-OFF

PART I. BACKGROUND

FACILITY NAME: SWS Silicones Corp.

FACILITY LOCATION: Adrian, MI

RCRA ID NUMBER: MID075400671

TYPE OF PERMIT

✓ Storage	___ Treatment	___ Disposal
✓ Container	___ Tank	___ Injection Well
✓ Tank	___ Surface Impoundment	___ Landfill
___ Waste Pile	___ Incinerator	___ Land Application
___ Surface Impoundment	___ Other (Detonation)	___ Surface Impoundment

PART II. REVIEW PACKAGE CONTENT

- ✓ Final Permit w/Attachments
- ✓ Responsiveness Summary
- ✓ Letter to Applicant
- ✓ Letter to Commentors
- ✓ Administrative Record
- ___ _____

SEP 1 [illegible]
WASTE MAN. BRANCH

PART III. CONCURRENCES

	WASTE MANAGEMENT BRANCH	INITIALS	DATE	AGREE	DISAGREE
1.	TECH. PERMIT CONTACT, Debus	AD	8/7/84	(✓)	( )
2.	CHIEF, STATE TECHNICAL UNIT 3	WEM	8/7/84	(✓)	( )
3.	CHIEF, TP&C SECTION	[illegible]	8/7/84	(X)	( )
3A.	CHIEF, SPIS	[illegible]	8/10/84	(✓)	( )
4.	CHIEF, WASTE MAN. BRANCH	[illegible]	8/14/84	(✓)	( )
	OFFICE OF REGIONAL COUNSEL				
5.	ASSIST. REG. COUNSEL, Berman	___	___	( )	( )
6.	CHIEF, SOLID WASTE & EMER. RESPONSE BR.	___	___	( )	( )
7.	REGIONAL COUNSEL	___	___	( )	( )

see ORC initials on yellow tissues

PART IV. APPROVAL

DIRECTOR, WASTE MANAGEMENT DIVISION	DS 9/10/84 [illegible]	9/10/84	(✓)	( )

cc: Section Log
ORC